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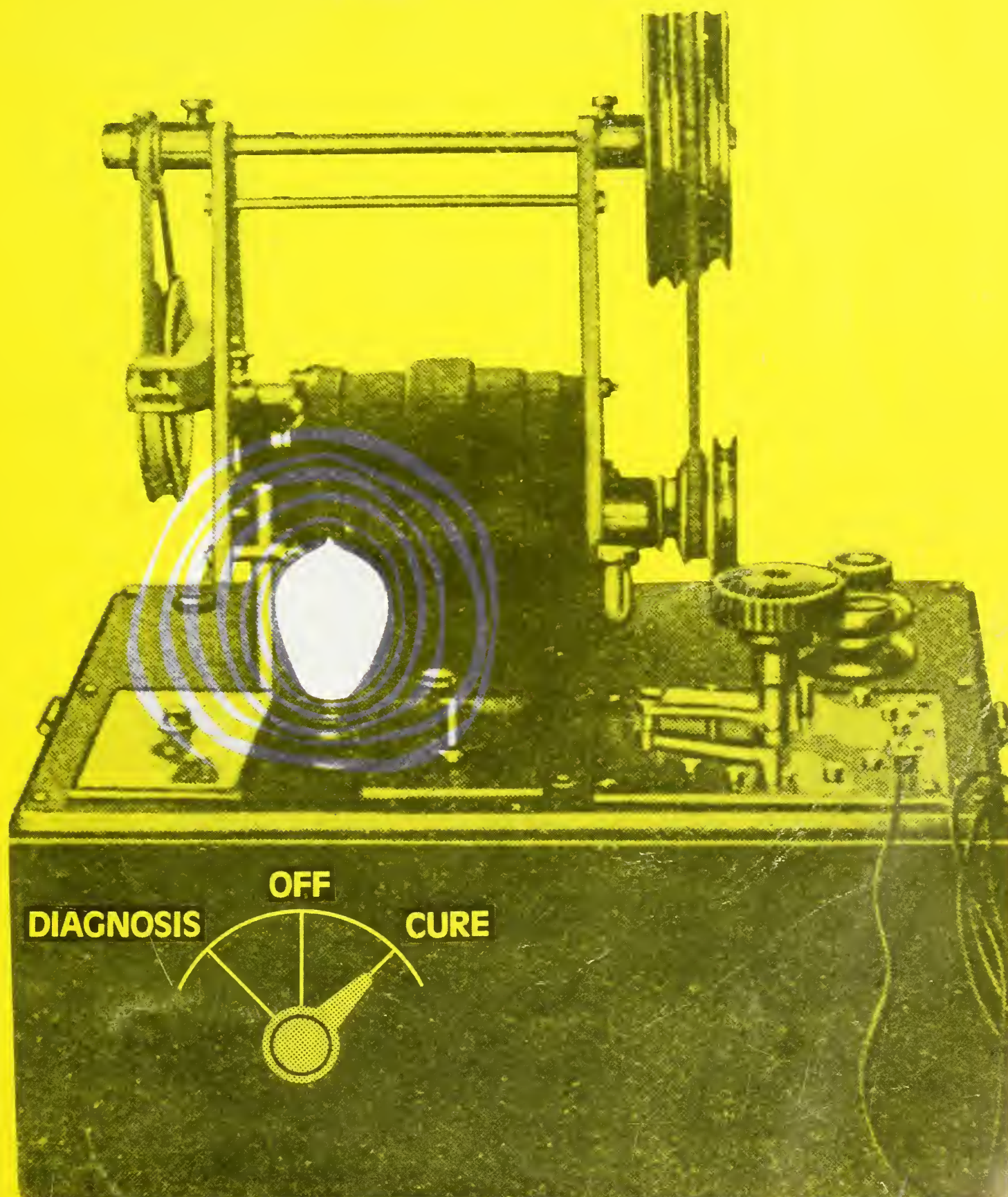
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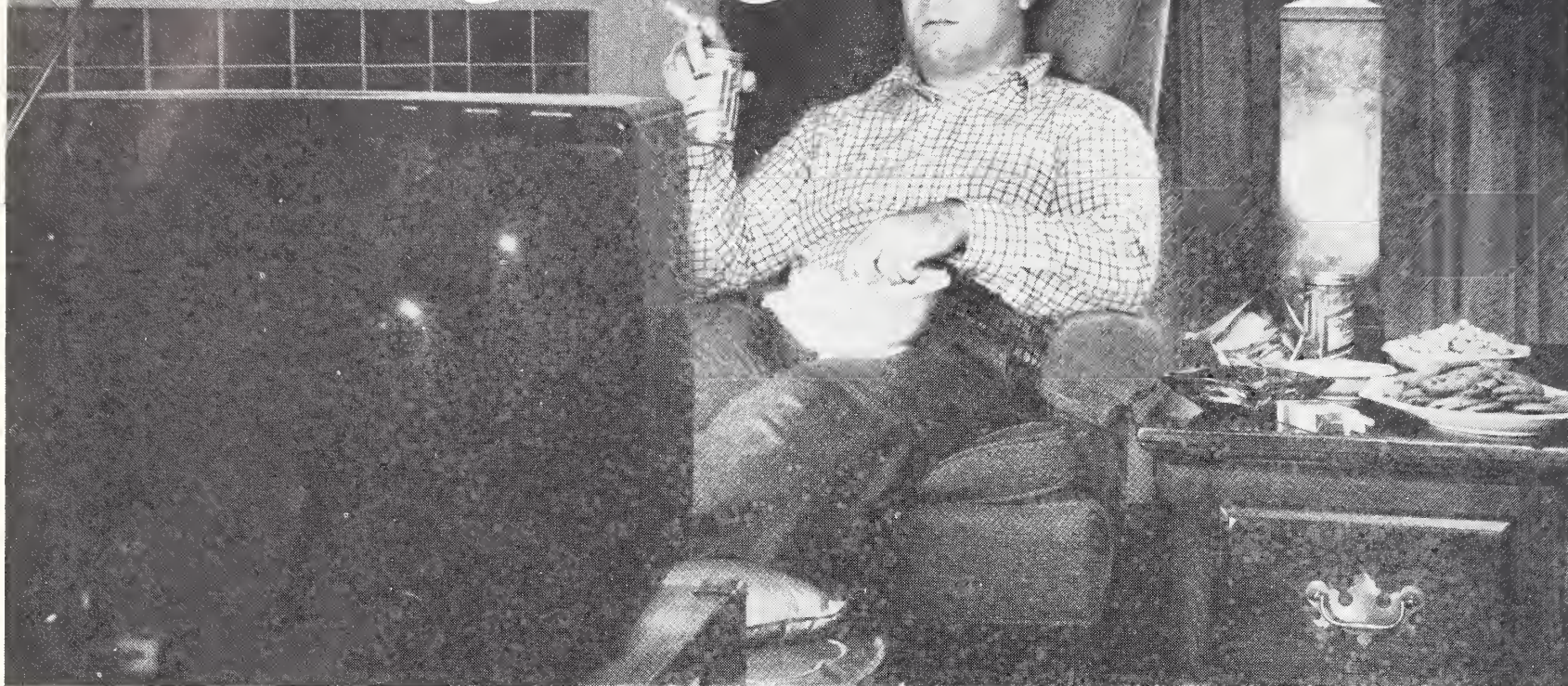
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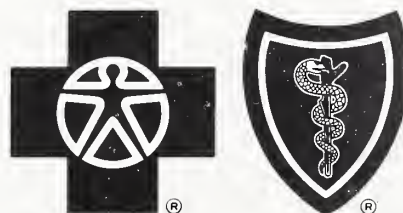
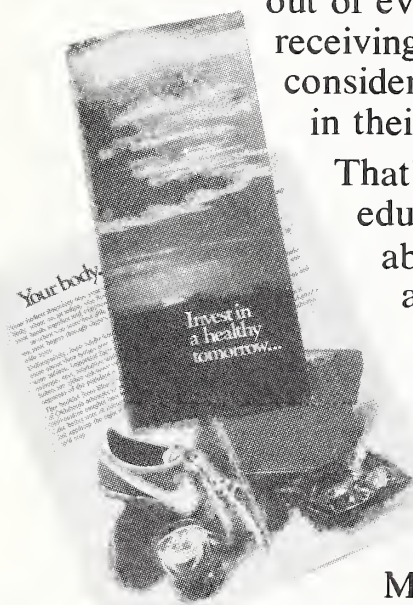
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Courtroom Capers

OSMA
JOURNAL / editorial

The spectacle of a lawyer exhorting in court for a premise which he must know to be of questionable validity, if not morally tenuous or completely fallacious, is perplexing to most physicians. The average Doctor of Medicine, brought up as he is in a rigid scientific discipline, finds it difficult to accept a plea which is obviously distorted or bent to the letter of the law in apparent disregard of what he instinctively recognizes as just or right. For in the practice of medicine we are, in a sense, all judges. We are constantly weighing the evidence pro and con and coming to our own decisions.

But in court the judgment is not ours to make. Our judicial system is so designed that almost any plaintiff can have his day no matter how preposterous his claims, provided he can find an attorney to argue his case. The fundamental distinction here between the approach of law and that of medicine is that the lawyer's position is a biased position. He is an acknowledged advocate for one side, even irrespective of the true merits of the case. If we physicians can understand and make allowances for that, some courtroom proceedings that dismay us may be more comprehensible.

Certain attorneys achieve distinction as "plaintiff's lawyers." Indeed, this has become a sort of specialty in law, one which is at times sullied by "ambulance chasing" types of abuses. Unfortunately a few physicians have become virtual habitués of the courtroom, sitting almost exclusively on the plaintiff's side of damage suits giving testimony for undisclosed fees. Somehow when a practice is lucrative enough it becomes remarkably easy to rationalize professional misgivings.

A current fad in damage suits involves the disease resulting in coronary thrombosis. In spite of the fact that atherosclerosis is generally recognized as the underlying pathology of the leading cause of death in the United States, that it develops over a period of many years and cannot be diagnosed with certainty until nearly the end-stage has been reached, employers are being sued with increasing frequency because of myocardial infarctions sustained by employees at work, ascribed to alleged overexertion or mental stress incident to employment. Certainly it would be unusual indeed if so common an illness did not occasionally strike during working hours. Yet a typical plaintiff's

argument will completely disregard virtually all the known facts of etiology of this disease — its familial incidence, the role of diet, tobacco, obesity and physical exercise, its relationship to lipid metabolism and to diabetes, hypertension and doubtless an X-factor or two — and claim that unusual physical or mental stress suffered at work was the cause of the employee's attack.

Disheartening it is to see as a party to such legal chicanery an otherwise conscientious and respected physician. Actually sizable judgments have been awarded on medically flimsy evidence, and legal liability in coronary occlusion is assuming, in certain circles, the important legal status of a precedent. The lengths to which such a precedence could be carried are appalling and at some stage it all must reach the point of ridiculous absurdity.

Organized medicine bears a special responsibility here, for unless medicine does police its own ranks in this way, a license to practice can become a blank check cashed at the expense of the entire medical fraternity and of the public. Many local medical societies are reviving long dormant committees on forensic matters. Elsewhere physicians have agreed upon schedules of standard fees for giving medical testimony, fees that are in proportion to the time and effort expended rather than to the size of the claim. One might hope that the legal profession will follow suit.

On this question the American Medical Association has a few things to say. After stressing that a physician should never testify in any area of specialization in which he is not qualified, that he should be courteous and modest in court, avoiding argument with the attorneys, that he should admit to the fallibility of medical opinion and should set forth his testimony in simple layman's terms, the AMA admonishes us to "at all times, keep the dignity befitting a doctor." That dignity precludes medico-legal meddling. The professional status of a physician or attorney involves a very real responsibility to the public — in the courtroom as well as in the office. *Dale Groom, MD*

From November 22-30, fifty-eight members of Oklahoma State Medical Association had the unusual opportunity of inspecting first-hand the National Health Service of Great Britain. With their families, they traveled to London at their own expense for an OSMA-sponsored National Health Service Seminar.



A crowded week was devoted to tours of the Birmingham and Oxford Health Authorities, the government-operated Royal Northern Hospital of London, the Wellington Hospital (a private proprietary hospital), and a visit to the Royal College of Surgeons and its fabulous Hunter Museum. In the shadow of the historic Tower of London, there were enlightening presentations by practicing English physicians both within and outside the NHS, by administrative officials of the Service, and by prominent medical educators.

Everywhere, the Oklahomans were treated with that wonderful brand of courtesy and kindness which mark the British people, and many personal and professional friendships were made among the physicians who gave so freely of their time and expertise. We are grateful for their warm hospitality which contributed so much to a memorable visit.

More and more, the vocal advocates of national health insurance in the United States are holding up the National Health Service of Great Britain as a shining example of successful socialized medicine in action. HEW Secretary Joseph Califano has recently returned from a costly junket to England at taxpayers' expense, effusively extolling the virtues of the British health care system.

Comparing the British National Health Service with our own American system is like comparing apples and oranges. The English program utilizes general practitioners who provide an office practice for up to 2,500 patients each. Those who require surgery and more comprehensive procedures are referred to specialists and hospital-based physicians. There is little private practice, as the average Briton cannot afford it, and most doctors work under contract or as civil servants. In America, by contrast, medical care is largely rendered by individual practitioners and clinics on a fee-for-service basis to private patients.

The National Health Service has brought the British people more medical care than they enjoyed

prior to its formal establishment in 1948. It is accepted, certainly with some reservations, by the rank-and-file of citizens. The British are more adaptable to regimentation and willing to patiently endure the shortcomings of NHS than could ever be expected of Americans.

However, we came away from London with some distinct impressions:

1. The British system provides no answer to the problems of distribution and access to care, and to cost containment. Many Britons have difficulty in securing a general practitioner to accept them on their panel. Some industrial areas are inadequately staffed with doctors to provide necessary basic care.

2. Health care is effectively rationed through long delays for elective procedures and surgery — up to 18 months in some cases. At present, there are about 560,000 patients waiting on any single day. Many of these are disabled and out of work because of their ailment.

3. The administrative bureaucracy and its resultant red tape is incredible. There are four distinct levels of authority which must approve the simplest thing. Physicians everywhere in England said they were bogged down in paper work.

4. The general practitioners with whom we visited in England told us that upwards of 50 per cent of the patients they see have minor problems which don't really require a doctor's attention — but the patients come because the care is free to them.

5. Finally, the thing which really struck all of us is that the medical profession of Great Britain is being slowly demoralized by this inefficient system in which they are economically forced to participate. The only doctors there who are really happy are the few who can do some private practice (and interestingly, more and more Britons are making the sacrifice to go to private physicians). Incomes are extremely low for the NHS participant-physician — \$13,700 to \$14,500 annually. Most are overburdened with patients and paperwork. There is little continuity of care between the general practitioner and the specialist to whom patients are referred — the GP does get a report back, but it is usually two to three months later. The general practitioner does not practice in the hospital. Hospitals are old and frequently delapidated, and significantly, the only new hospital to be built in recent years, a handsome facility in Oxford, cannot be opened and operated because of lack of funds. There is no peer review. Small wonder that the British medical profession is becoming demoralized and discouraged.

Essentially, the freedom to do well what needs to be done in providing health care in Great Britain is lacking because of these multiple factors. That same freedom is what has made the American system of health care the greatest in the world. □

C. S. Lewis, M.D.

Development of Ampicillin-Resistance During Treatment of *Haemophilus* *Influenzae* Pneumonia

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Haemophilus influenzae pneumonia usually responds to Ampicillin. However, Ampicillin-resistance may develop during therapy and present both diagnostic and therapeutic problems.

SUMMARY

A case of *Haemophilus influenzae* pneumonia is described in which the offending organism was initially sensitive to ampicillin and the patient had an initial favorable clinical response to ampicillin. On the sixth day of ampicillin therapy, the patient began to deteriorate, sputum production increased, temperature elevation returned and pulmonary infiltrates progressed. Sputum cultures at this time yielded pure cultures of ampicillin-resistant *H. influenzae*. Intravenous chloramphenicol treatment was instituted and an un-

eventful recovery ensued. To our knowledge this represents the first case of *H. influenzae* pneumonia in which the offending organism developed resistance during the course of therapy.

INTRODUCTION

Since 1973, many clinical isolates of *Haemophilus influenzae* type b (from many locations) have been reported to be highly resistant to *in vitro* ampicillin. Most of these isolates have been cultured from cases of meningitis and the clinical course corroborated the *in vitro* susceptibility results.^{1, 4} We report a case of *H. influenzae* pneumonia in an adult in whom the original organism isolated was sensitive to ampicillin. There was an initial favorable response to ampicillin followed by clinical deterioration and recovery of an ampicillin-resistant *H. influenzae*.

REPORT OF A CASE

A 57-year-old man was referred to the VA Hospital, Oklahoma City, Oklahoma with a diagnosis of myasthenia gravis but with a poor response to Tensilon^R and Mestinon.^R The patient was having difficulty swallowing and handling his copious oral secretions. Physical findings at that time were essentially within normal limits with the exception of the

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neurological examination which revealed a bilateral motor paralysis of cranial nerve V with associated involvement of cranial nerves VII, IX, XII and probably X. In addition, weakness of the deltoid muscles was present bilaterally. No other neurological deficits could be demonstrated. Routine laboratory studies, including hemogram, blood chemistries, urinalysis, VDRL, and the admission chest x-ray were unremarkable. Mestinon^R therapy was terminated because of the possibility of a "cholinergic crisis," and the patient observed.

Four days following admission, he developed marked respiratory distress. He became severely hypoxic (PO₂-34) with a temperature of 102°F (rectally). Diffuse rales and rhonchi were heard in both lung bases, and he was producing large amounts of purulent sputum. A chest x-ray revealed a right lower lobe infiltrate, not present at the time of admission, and the white blood cell (WBC) count was noted to be elevated to 12,800 cu mm with 85% polys. Endotracheal intubation was performed, and the patient was placed on mechanical ventilation. Copious purulent sputum suctioned from the endotracheal tube contained abundant leukocytes and large numbers of small, intracellular and extracellular pleomorphic gram negative rods compatible with *H. influenzae* on gram stain. Ampicillin, 500 mg was given intravenously (IV) every six hours. Sputum culture yielded *H. influenzae* type b in pure culture, sensitive to ampicillin by the demonstration of at least 20 millimeter zone of inhibition with 10 microgram ampicillin discs and an inoculum of 10⁵ organisms. Blood cultures were negative. On the following day, because of continued respiratory difficulties, a tracheostomy was performed, followed by bronchoscopy and the removal of large numbers of mucous plugs.

The patient's clinical status improved slowly, and by the fifth day of ampicillin therapy he had progressed to the point where flow-by oxygen with intermittent mandatory ventilation was tolerated. He was afebrile, and the WBC count had fallen to 5,200/cu mm. On the sixth day of treatment, however, and without any apparent predisposing events (ie aspiration) he began producing increasing amounts of purulent sputum and spiked a temperature to 101.° Chest x-ray now revealed a new left lower lobe infiltrate in addition to

the previously described, now partially resolved, right lower lobe infiltrate. Repeat sputum cultures all grew pure cultures of *H. influenzae* type b now demonstrating considerably less than 20 mm zone of inhibition with the 10 microgram ampicillin disc. The initial isolate remained ampicillin-sensitive on retesting. Blood cultures and urine cultures were negative. Ampicillin therapy was stopped and chloramphenicol, one gram was given IV every six hours. The patient made an uneventful recovery from the pneumonia and by the tenth day was afebrile and off mechanical ventilation. Chloramphenicol was continued for a total of ten days, then discontinued without recurrence of respiratory symptoms. The Tensilon^R test was positive, and Mestinon^R was reinstituted with striking improvement.

DISCUSSION

Haemophilus influenzae was first isolated by Pfeiffer in 1892 from several patients suffering from influenza. It was considered to be the cause of viral influenza until the 1918 pan-

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demic, which accounts for the species designation. The naming of *H. influenzae*, which was based on erroneous data, still causes much confusion. This small, short, plump, sometimes encapsulated gram-negative rod was recognized as an important cause of meningitis in children as early as 1899 by Slawyk. Its importance as a pulmonary pathogen, however, was not demonstrated until 1936 by Lemierre.⁵ Today, it is recognized as the etiologic agent in many diseases, the most commonly: pharyngitis, laryngotracheitis, epiglottitis, pneumonia, bronchiolitis, otitis media and meningitis. In general, these are far more common in children than adults.

The organism's capsule which possesses marked antiphagocytic properties appears to be its main virulence factor and the capsular polysaccharide determines the six different types (a, b, c, d, e, & f). The drug of choice for treating serious *H. influenzae* infections has been ampicillin. However, in the past few years many *H. influenzae* strains, especially type b, have become resistant to ampicillin, hence the recommendation for treating serious *H. influenzae* infections with chloramphenicol initially and at least until sensitivities prove otherwise.⁶ The mechanisms by which such organisms may develop resistance to ampicillin are three:

1) The passage of extrachromosomal genetic material such as resistance transfer factors (RTF) from a resistant organism to a sensitive microbe. This phenomenon has been demonstrated to account for the development of ampicillin resistance in *Haemophilus influenzae*, type b.⁷

2) The production of antibiotic inhibitors or inactivators such as penicillinase or beta Lactamase.⁸ This is a possibility in this case and cannot be ruled out since we were unable to test the organism for these enzymes.

3) The possibility that the initial infection was caused by both an ampicillin-sensitive and a resistant mutant of *H. influenzae* is real.⁹ The initial administration of ampicillin would remove all the sensitive strains leaving the resistant ones unaffected.

Even though we were unable to discern

whether the organisms acquired the ability to inactivate ampicillin during the course of the disease or if the total population of *H. influenzae* contained both ampicillin-sensitive and resistant mutants, this particular case does demonstrate that ampicillin-resistant *H. influenzae* is associated with pneumonia and that ampicillin resistance can in fact develop during the course of therapy, illustrating that close clinical observation and retesting organisms' antibiotic sensitivities are mandatory when clinical deterioration occurs.

To our knowledge this represents the first case of *H. influenzae* pneumonia in which the offending organism developed resistance during the course of therapy, and reemphasizes not only the necessity to start all patients with serious *H. influenzae* infections, ie meningitis, epiglottitis and pneumonia, on chloramphenicol alone or in combination with ampicillin prior to sensitivity determinations but also to monitor closely the patient and the organism during therapy. □

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NONPROPRIETARY NAMES AND TRADEMARKS OF DRUGS

edrophonium	Tensilon ^R
pyridostigmine bromide	Mestinon ^R
ampicillin sodium	Polycillin-N
chloramphenicol	Chloromycetin ^R

Antipsychotic Drugs — An Update

K. D. CHARALAMPOUS, MD
G. A. KEEPERS, MD

Many new drugs are appearing which make it possible to achieve better control of symptoms and, at the same time, minimize undesirable side effects.

Pharmacotherapy is the principal treatment for schizophrenia. In clinical studies antipsychotic drugs have been proved superior to psychotherapy, sociotherapy and milieu therapy. While much has been learned in recent years about the mechanism of action of these drugs, basic principles for their utilization remain essentially unchanged.

Accumulated data implicate all neurotransmitters in the action of antipsychotic drugs, particularly dopamine and norepinephrine.^{1, 2} These drugs block central

dopaminergic transmission, secondarily giving rise to extrapyramidal side effects. Overactivity of dopaminergic systems may be in part responsible for overarousal in schizophrenia and may explain the inherited susceptibility to it. Though the overarousal concept of schizophrenia is still vague, it would explain why certain drugs can induce or alleviate psychotic states and would indicate that antipsychotic drugs may actually treat the disease and not just the symptoms.¹

The antipsychotic drugs modify both the primary and secondary symptoms of schizophrenia, improving thought disorder, blunted effect, withdrawal, retardation, abulia, and autistic behavior. Favorable changes also occur in belligerence, restiveness, perceptual disturbances, and paranoid ideation. No evidence exists, though, that any one drug has a selective effect on a particular symptom complex, and the effectiveness of a particular antipsychotic cannot be judged on the basis of a patient's agitation, passivity or withdrawal.

The key to effective pharmacotherapy in schizophrenia is the individualization of treatment regimens, since the effectiveness of a particular medication in an individual patient cannot be easily predicted. The initial drug choice must be based on personal preference, history of drug efficacy or drug side effects, and a trial of at least two months to determine the efficacy of a particular anti-

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psychotic drug in a given patient. Should an antipsychotic prove ineffective then a drug from a different family would be indicated.

In the treatment of acute psychosis neuroleptic dosages are increased rapidly; the final dose reached must be determined on the basis of the patient's response. Although the recommendations on the package insert are a good starting point, the recommended dosages may be increased several times especially for young acute patients. Some patients require high doses to produce effective blood levels due to poor absorption or especially rapid metabolism. Others given low doses may do quite well, because of a deficit in metabolism which maintains high blood levels; these patients would worsen on high doses. With advancing age, a patient's ability to distribute, detoxify, and eliminate antipsychotic drugs may be reduced, thereby increasing the risk of toxic side effects. For geriatric patients, the starting dose should be one-third to one-half that used with young adults. In general, the value of drug therapy declines as a patient gets older and the disease gets more chronic; social therapies then become more important.

Once an acute episode has been controlled, the antipsychotic dosage may be lowered to a maintenance dose for six months, after which further treatment should be individualized. A two-or-three-days per week drug holiday is useful in the majority of chronic patients and decreases the expense and incidence of side effects without jeopardizing the patient's status.

These general principles are applicable to the new antipsychotic medications as well as to the familiar phenothiazines, thioxanthenes, and butyrophenones. Many drugs have been added recently to the therapeutic armamentarium. Of these, the long-acting phenothiazines, fluphenazine enanthate and decanoate, have proven themselves particularly effective in assuring bioavailability, avoiding noncompliance, and utilizing nursing time efficiently.^{3, 4} These two injectable preparations, the enanthic and decanoic esters of fluphenazine, are as effective as daily oral doses of the parent compound. They have therapeutic activity for two or three weeks after injection despite declining plasma levels. The onset of action is similar to the parent compound, so that they may be used to control acute episodes. Since the dosage is one-third the oral dose of the parent compound and blood levels are lower between injections, the inci-

dence of untoward side effects such as tardive dyskinesia after prolonged maintenance may also be less. Because these drugs are injectable and long-acting, they have helped overcome the problem of non-compliance and have provided an expedient and economical approach in terms of nursing time and expense.

Other newcomers are indicated in particular cases. Molindone, the only available member of the dihydroindolone family, is structurally dissimilar to other antipsychotics and differs somewhat in its mode of action, in that it does not inhibit the norepinephrine uptake pump.⁵ It may, therefore, be useful in hypertensive schizophrenics treated with guanethidine and in those unable to utilize other antipsychotics.

The neuroleptic family of the dibenzoxazepines includes loxapine, clothiapine, metiapine and clozapine.⁶⁻⁷ Only loxapine and clozapine have been extensively studied. Loxapine has been shown to be an active antipsychotic with a side effect profile resembling piperazine phenothiazines. Clozapine, while clinically effective, has an atypical pharmacological profile, and has not been associated with extrapyramidal symptoms. For this reason, it is of great interest and is being actively investigated.

Penfluridol, pimozide, and fluspirilene are the three members of the diphenylbutylpiperidine series.^{8, 9} Pimozide, the prototype of this series, is an effective antipsychotic but possesses no clear-cut advantage over other neuroleptics, except perhaps as a maintenance neuroleptic. Fluspirilene, which is administered intramuscularly, becomes active im-

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mediately, a trait which distinguishes it from the long-acting fluphenazine preparations, and remains active for seven days after injection. Fluspirilene and the orally-given perfluridol maintain therapeutic plasma levels for a week and are useful in maintenance therapy. Recently, perfluridol's use was banned in the US because long-term toxicity studies produced pancreatic tumors in rats. No abnormal laboratory value has been seen in humans and the case against this drug should not be considered closed. In the United States this family of drugs is as yet experimental, but possesses great potential.

The side effects of the antipsychotics are well known; dystonia and akathisia^{12, 13} have been treated customarily with antiparkinsonian agents, often as routine practice. It is important, therefore, to note that only a minority of patients develop extrapyramidal symptoms of clinical significance when given antipsychotic medications. Of those that need treatment, only a few require antiparkinsonian agents for more than three months. When antiparkinsonian agents are withdrawn, the highest recurrence of significant extrapyramidal symptoms found was 27%¹⁴ while the lowest was 4%.¹⁵

Since combinations of antipsychotics with antiparkinsonian agents will sometimes produce glaucoma, xerostomia, ileus, hypotension, urinary retention and cardiac irregularities, antiparkinsonian agents should be utilized only when and for the length of time needed. Additive anticholinergic effects may also produce the "central anticholinergic syndrome," a toxic confusional state produced by the superimposition of an atropine-like psychosis upon the primary psychiatric disorder. Characteristically, its onset is heralded by the worsening of psychotic symptoms, disturbance of immediate memory, disorientation, visual hallucinations and peripheral anticholinergic signs. The incidence of these reactions increases with age.¹⁶ Because they possess the highest anticholinergic activity of the antipsychotics, mesoridazine, thioridazine and chlorpromazine are most often implicated in the production of unwanted atropinic effects.

In addition to their additive anticholinergic effects, the antiparkinsonian agents have other undesirable interactions with antipsychotics. Animal studies demonstrated that

antiparkinsonian agents along with other anticholinergic compounds antagonized the antiavoidance actions of antipsychotics. Subsequent studies in humans have indicated that antiparkinsonian agents reduce neuroleptic levels in plasma and that reduced plasma concentrations correlate with reduced therapeutic efficacy.¹⁷ The mechanism through which antiparkinsonian agents produce this effect is not known.

Cardiovascular side effects and agranulocytosis have additionally caused some concern among physicians. The reported effects of the antipsychotics on the cardiovascular system include hypotension, EKG changes, arrhythmia, infarction, cardiomyopathy, and cardiac failure. These effects are 1) dose dependent, 2) more frequent with aliphatic and piperidine phenothiazine derivatives, 3) more likely to occur with chronic administration, with the exception of hypotension, and 4) more apt to occur in patients susceptible to or having cardiovascular disease. Acute poisoning and polypharmacy may add extra risks. While these reactions can be severe, toxicities develop in only a small percentage of patients who are placed on phenothiazines.^{18, 19}

Agranulocytosis is also a rare but severe complication which reportedly occurs more frequently with aliphatic phenothiazine derivatives than with other antipsychotic drugs and with older or obese patients.²⁰ Routine blood counts are not indicated except perhaps in high risk patients, but patients should be instructed to report sore throats and fevers immediately so that an emergency white blood cell count can be obtained.

Pharmacotherapy has been proven through numerous animal and clinical studies to be the core of therapy programs for most schizophrenics. Antipsychotic drugs, however, do not help all schizophrenics nor do they, even when effective, control all symptoms. To maximize a patient's improvement, a clinician must consider carefully the drug and dosage proper to the individual psychotic picture. While antipsychotics have proven more effective than any other single therapy modality, most psychiatrists agree that pharmacotherapy is most effective when augmented by other treatments. Because considerable room for improvement exists in the effectiveness and safety of existing antipsychotic drugs, research involving discovery and development of additional compounds continues.

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Neonatal Transport, 1976

MARY ANNE McCAFFREE, MD

Critically ill newborns can be transported to an intensive care neonatal unit via a specially-trained and outfitted system. This transport team has transported 394 infants with an overall survival rate of 70%. The improved outlook for neonates who are critically ill is attributable to improved care of the infants and outreach education for physicians and nursing personnel caring for these infants.

Regionalization of care for Oklahomans has been necessary in order that specialized care can be provided to all its people. Care of the critically-ill newborn requires specialized intensive care presently being provided by regional neonatal units in two locales in the state, Oklahoma City and Tulsa. Ideal care of the high-risk neonate could be provided if the infant were transported *in-utero* after identification of it as a high-risk, in-jeopardy fetus; care would then be rendered at a high-risk perinatal service. However, identification of such infants is not always possible and infants are sometimes born great distances from the

regional neonatal units. The utilization of ground and air transportation in moving these high-risk infants to regional intensive care nurseries has been documented.^{1, 4} During transport, the critically-ill neonate needs intensive care and monitoring for the best outcome to be obtained. A specially trained transport team with personnel and equipment capable of rendering this care is fundamental to the provision of specialized care in the regional network.^{2, 3}

It is the purpose of this paper to report the experience of the neonatal transport team at the Oklahoma Children's Memorial Hospital (OCMH) during its first 13 months of operation.

MATERIALS AND METHODS

The Neonatal Intensive Care Unit at OCMH has provided regional care for the hospitals in the central and western part of the state since its development in 1973. It has been developed into a 30-bed intensive care facility with 12 beds equipped for continuous cardiac and apnea monitoring; a thermoneutral environment and assisted ventilation has been provided in this unit. The staff has included trained nursing personnel, respiratory therapists, house physicians and multidisciplinary specialists.

The neonate transport team became operational November 1, 1975, after an initial period of orientation and specialized training of nurs-

From the Department of Pediatrics, University of Oklahoma Health Sciences Center, Oklahoma Children's Memorial Hospital, Oklahoma City, Oklahoma

ing personnel in the transport of the sick newborn. This team has consisted of a Neonatal Intensive Care Unit (NICU) nurse specially trained in the care of the sick neonate, and a respiratory therapist who has had previous experience in neonatal respiratory care and management of the sick newborn. An experienced ambulance driver also has worked with the team.

The transport team nursing personnel received intensive care training in pediatric cardiopulmonary resuscitation during a period of nine classes. These included training in special techniques, especially intravenous placement, umbilical vein catheterization and intubation. In addition, evaluation of chest X-rays, physical examination of the infant in distress and a review of the common abnormalities associated with the premature infant were reviewed. The staff neonatologist and in-service neonatal nurse educator coordinated the in-service education of the transport team. Monthly meetings attended by transport team members and staff neonatologists provided a means of reviewing data.

All neonatal transports were reviewed and grouped into two time periods; from November 1, 1975 to March 31, 1976 (hereafter referred to as period I), and from April 1, 1976 to December 31, 1976 (hereafter referred to as period II). (Fig 1) During the second period multiple in-service education seminars were conducted for both physicians and nursing personnel from the originating hospitals, in addition to individual patient follow-ups with each referring physician regarding the patient's hospital course.

During the transport periods two modes of transportation were utilized. Ground transportation was provided by a commercial van equipped with a transport isolette and an adapted respirator. Air transportation was via a fixed propeller airplane (Piper Cherokee or Piper Navajo) in which the isolette and adapted respirator could be outfitted. Selection of the type of transportation depended upon the distance of the originating hospital from the

FIGURE 1

TRANSPORTED/ ADMISSIONS	% TRANSPORTED	% DIED TOTAL
Group 1	56%	24
Group 11	76%	21
Total (mean)	70%	22

FIGURE 2
NEONATAL REFERRAL

Name: _____

Referring MD: _____

Date of Birth: _____

Hospital: _____

Town: _____

Time of Birth: _____ Other: _____

Apgar: _____

Dx: _____

Vital signs: _____

O₂ %: _____

Apnea: _____

Cyanosis: _____

Other: _____

Lab: _____

Blood gasses: _____

Dextrostix: _____

Chest X-ray: _____

Hematocrit: _____

Drugs: _____

IV with D₁₀: _____

Vitamin K: _____

Need: Copy of the charts of the mother and the baby, blood—mother and cord, placenta, and a vaginal culture of the mother.

neonatal unit, the severity of the infant's disease and weather conditions. Mobilization of the team occurred upon receipt of a phone call from the referring physician at the originating hospital. At this time, information concerning the infant was obtained by either the attending neonatologist, the resident physician, or a member of the transport team and recorded on the neonatal referral sheet. (Fig 2) At this time advice was given to the referral personnel regarding initial monitoring of the infant, *ie* blood gas determination, vital signs, etc, and initial investigative studies such as dextrostix, chest x-rays, etc were suggested. Requests for information documenting the infant's condition and the perinatal course included a copy of the infant's and mother's charts, mother's and infant's blood, copy of the X-rays, maternal vaginal culture, and the placenta. At departure of the transport team from OCMH, contact with the referral hospital was again made to inquire about any change in the infant's course and to offer other advice.

Upon arrival at the referring hospital, patient evaluation and emergency therapy was rendered as necessary. Prior to the transport

team's departure from the referring hospital, phone confirmation to the NICU regarding the estimated time of departure and arrival time, the infant's status and other pertinent information was established. The transport team moved the critically-ill neonate to the mother's hospital bed. This allowed maternal-infant contact to occur with the infant stabilized; the mother was then able to see and touch her baby, often for the first time. She also received a booklet of information regarding the neonatal unit and established contact with the neonatal intensive care nurse during this visit. Transport of the critically-ill neonate was then accomplished with the infant stable. Safe transport was accomplished at the recommended air or ground speed. It was unnecessary to travel at higher speeds (or "code-three") since, in the neonatal unit with its specialized equipment and personnel, intensive care and emergency therapy were provided.

RESULTS

During the time periods of November 1, 1975 through December 31, 1976, a total of 394 infants were transported from their originating hospitals via OCMH transport teams to the neonatal unit. During this same period 563 infants were admitted to the unit, or a total of 70% of the infants admitted during the two time periods were transported via the neonatal transport system. Evaluation of the two time periods revealed that 105 infants were transported in period I and 289 infants were transported in period II. The total number of admissions to the unit for period I was 187 and for period II was 376. In summary, 56% of the infants admitted to the unit were transported in period I and 76% of the infants admitted were transported during period II. (Fig 1) Comparison of number of infants transported by the team in the two time periods revealed a 36% increase in the number of infants transported in period II compared to period I; during this

same time, approximately a 50% increase in the number of admissions to the unit occurred.

Comparison of the mortality data during the two time periods revealed that 49 infants admitted during period I and 75 infants admitted during period II died. The number of infants transported who died during period I was approximately 30% of the total number of infants transported during that time period. Analysis of the second time period revealed that 63 of 289 transported infants died during that time, representing a 21% mortality rate. A comparison of the total number of admissions for both time periods revealed that 24% of infants died in group I and 21% of infants died in group II. A slightly higher mortality rate occurred in infants transported in the first time period as compared to any other group. (Fig 1)

The origins of the infants in the two time periods can be seen in Fig 3. Infants were referred from 46 cities during both transport periods. During the early period infants were referred from 19 hospitals for transport to the neonatal unit. In the second phase, infants were referred from 32 hospitals for transport to the neonatal unit as schematically diagrammed on the state map. (Fig 4)

DISCUSSION

Improved delivery of care for the critically-ill neonate has been possible through regional-

FIGURE 3
ORIGINS OF INFANTS

Ada	Mangum
Altus	Marlow
Anadarko	McCurtain
Ardmore	Miami
Blackwell	Muskogee
Chickasha	Norman
Clinton	Okarche
Duncan	Oklahoma City
Durant	Pauls Valley
Edmond	Pawnee
Elk City	Ponca City
El Reno	Purcell
Enid	Pushmataha
Frederick	Sayre
Ft. Sill	Shattuck
Guymon	Shawnee
Hobart	Sherman, Tx.
Holdenville	Stroud
Hugo	Sulphur
Kingfisher	Thomas
Laverne	Tishomingo
Lindsay	Tulsa
Lubbock, Tx.	Weatherford

Mary Anne McCaffree, MD, was graduated from the University of Oklahoma Health Sciences Center School of Medicine in 1971, where she is now Assistant Professor of Pediatrics. Her specialty is neonatology. Dr McCaffree is a member of the Alpha Omega Alpha and the American Thoracic Society.



FIGURE 4

Number of Patients Referred per City from November 1, 1975 to December 31, 1976

ization of levels of care.¹ Identification of the fetus at risk *in-utero* warrants transfer of the expectant mother to a high-risk perinatal center for delivery under the best possible conditions. Despite this anticipatory care, premature and critically-ill infants are born in hospitals which cannot provide neonatal intensive care. Therefore, stabilization, resuscitation and transport of these infants to a special-care unit is crucial to their survival. Pettett et al³ demonstrated the capabilities of trained personnel in providing the mechanism for providing intensive care for critically-ill neonates.

The impact of improved stabilization during transport of the critically-ill neonate has been noted by several authors.^{1, 2, 3} A decrease in the mortality rate has been demonstrated in comparing the two periods of transport in this report. Previous studies have attributed improved neonatal survival to better temperature control, initiation of assisted ventilation and early transport of the critically-ill neonate.¹⁻⁴ Evaluation of our data for specific, statistically significant factors was done. However, no statistically significant data could be gleaned from the material except for the tendency of

the mortality rate to drop in the second time period. This may reflect greater awareness of the availability of the transport team. Improved techniques of temperature control, glucose administration, oxygen therapy and assisted ventilation at the referring hospitals may have accounted for the lower mortality rate. Development of such technical skills was stressed at each of the seminars given on a statewide basis at the beginning of period II.

Concomitant with the initiation of a specially-trained transport team, the members of the team assumed a responsibility for education of the personnel of the referring hospitals. Multiple means of disseminating information regarding infant resuscitation during transport included: (1) physician seminars, either state-wide or local, (2) nursing education, conferences occurring both at the referring hospital and the special care unit, (3) communication and education via a radio network, (4) individual follow-up regarding each patient, his condition upon arrival and his hospital course. All of these methods have been used in the Oklahoma transport system.

The need for improved means of continuing education for the personnel in the referring

hospitals has been noted by many.^{1,2} Continuing education for all members of the Oklahoma health care team has been planned in the future "outreach" sessions in the regional area hospitals. In addition, a "comeback" program for physician-education in the neonatal unit has been offered to every physician in the state of Oklahoma. This program allows the physician to participate in the care of the critically-ill newborn, supervised by the neonatal staff.

Recognition of the high-risk, fetus-in-jeopardy, improved perinatal care, fetal monitoring and new techniques in diagnosing the fetus in distress, resuscitation, stabilization

and transport of the critically-ill neonate will have the effect of improving the perinatal and neonatal mortality rates. Further evaluation of infants who are transported is continuing at the OCMH, and improved means of utilizing present educational facilities are being developed. □

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The Rise and Fall of Albert Abrams, AM, MD, FRMS

DAVID M. BAILEY

Albert Abrams who received his MD when only nineteen years old began what seemed to be a promising career in San Francisco. His talents and early publications received favorable recognition by his colleagues. Yet, his electronic machines used by practitioners in Oklahoma and other states, and several foreign countries, made him one of the greatest charlatans of the century.

INTRODUCTION

In 1882, a young man named Albert Abrams was graduated from the medical school at Heidelberg, Germany. At 19 years of age he was the youngest student to be graduated with a medical degree from that school in 100 years. From such a beginning, one might have expected Abrams to go on to a very successful career. He soon returned to his native California, quickly built up a large practice, and in 1893, became a Professor of Pathology at Cooper Medical College, the predecessor of Stanford. Abrams' talents were apparently

recognized by his colleagues, since he held several offices in medical societies. He was elected president of the Cooper Alumni Association in 1888, president of the San Francisco Medico-Chirurgical Society in 1893, and vice-president of the State Medical Society of California in the following year. Abrams wrote and published numerous articles and several books. His early work was well-received. However, Abrams was a rather eccentric individual. He gradually moved so far from the teachings of orthodox medicine that he has been generally acknowledged as the greatest charlatan of recent times. Abrams' notoriety resulted from his electronic theory of disease, which swept across the country and the world in the early 1920's.

BEGINNINGS

Not much is known about Abrams' childhood in San Francisco, although he was apparently a loner. His parents were sufficiently wealthy to send him to medical school in Europe. E. W. Page, writing in 1939, said that Abrams' parents instilled in him a desire to dominate others by intellectual achievement, and that he came to feel he was destined to become a sage, or even a prophet, and to possess both wealth and power.¹

As Abrams' practice grew, he began publishing his observations, which covered a

wide range of subjects, both medical and fictional. He had a great interest in diagnosis. When he was only 27 years old, he wrote his first textbook, *Manual of Clinical Diagnosis* (1891). The third edition in 1894 was reviewed in the *Journal of the American Medical Association* as generally well-written and containing much useful information.²

In addition to numerous articles, several of his books were published during his early career. *Transactions of the Antiseptic Club*, "illustrating the fads and foibles of modern MD's" came out in 1895. Advertising for this book in the flyleaf of a later publication proclaimed: "Truth is often a nauseous pill to swallow; here it has the sugar coating of humor flavored with unalloyed sarcasm."³ *Scattered Leaves of a Physician's Diary*, idealizing medical ethics, was published in 1901. It included references to quackery, one of Abrams' favorite topics. Also in 1901, Abrams' *Diseases of the Heart* appeared. According to Nathan Flaxman, it was concise, up-to-date, and easy to read. He had earlier demonstrated the value of x-ray in cardiac diagnosis. *Diseases of the Heart* was the second cardiology text written by an American, and it helped establish Abrams' national reputation.⁴

CAREER AT THE CROSSROADS

The period 1900-1910 seems to have been a turning point in Abrams' career. He was 36 years old in 1900, and although he had had some national exposure through his writing, apparently he had not achieved the fame he desired. His eccentricities were becoming known to his colleagues by that time. In 1900, he began publishing his "reflexes," the first being his "cardiac reflex of Abrams" which was a change in the size of the heart and aorta in response to irritation of the skin above those organs.⁵ The change in heart size was determined by percussing the chest and noting the areas of dullness. The heart reflex was followed by the lung reflex, and later the liver, knee-jerk, stomach, intestinal, vertebral concussion, and splenic reflexes.⁴

Books by Abrams during this time included *Nervous Breakdown* (1901), *The Blues (Splanchnic Neurasthenia)* (1904), *Diseases of the Lungs* (1905), and *Man and His Poisons* (1906). *The Blues* contained Abrams' theory that neurasthenia resulted in part from

stagnation of the blood in the splanchnic or abdominal veins. Abrams recommended treatment by physical exercise to strengthen the abdominal muscles. He described an apparatus of his own design to be used for this purpose.⁶ In a review in the *New York Medical Journal*, *Man and His Poisons* was described as offering many excellent suggestions, although Abrams was said to be sometimes radical in his views and discursive in their presentation.^{3,7} *Man and His Poisons* contained a section on treatment which included use of an electrical device designed by Abrams.

Abrams' *Spondylotherapy* which represented the completion of Abrams' metamorphosis was published in 1910. A review in *JAMA* concluded:

One wonders whether this is an attempt to explain osteopathy and chiropractic to the understanding of the regular practitioner, or to exploit the very ingenious percussion devices of the author, or whether it is really true that medical men really know practically nothing about the cure of disease through treatment of the spine. Let us hope it is the latter and that a careful study of this unique volume may open new avenues of therapy heretofore undreamed of.⁸

Only the last sentence of this review was selected for the advertising of Abrams' book.⁹

Abrams' disciples called spondylotherapy the science of evoking the reflexes of the body to diagnose and cure disease. Soon after publication of this book, Abrams began offering "clinical courses" in spondylotherapy in various parts of the country for a fifty-dollar fee. Surprisingly, *Spondylotherapy* went through six editions in eight years.⁴

Abrams had now committed himself to a career as a charlatan. There would be no turning back.

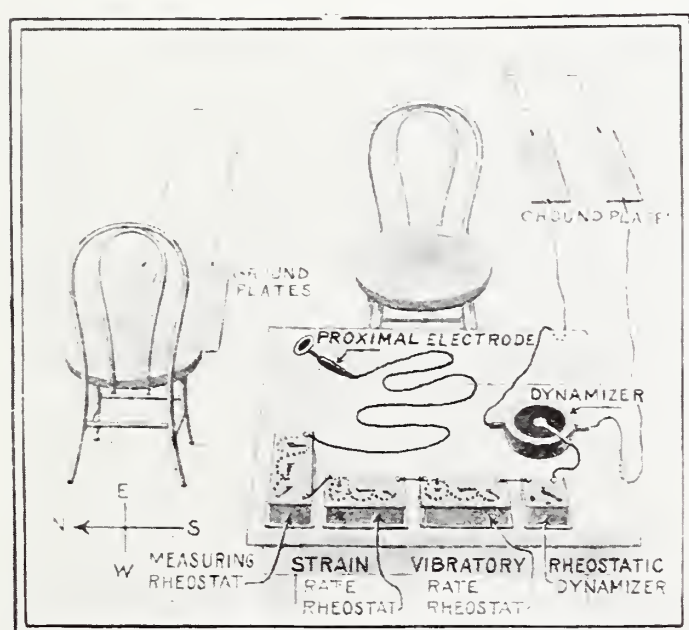
ALL THE WAY WITH E.R.A.

Even at Heidelberg, Abrams had shown an interest in electricity, and he had published an

David M. Bailey received the BS degree from Central, Missouri State University, Warrensburg, Missouri, in 1974. The original draft of this paper was written for a History of Medicine course offered in the Graduate College, University of Oklahoma Health Sciences Center. Mr. Bailey is now a first-year student in the College of Medicine.

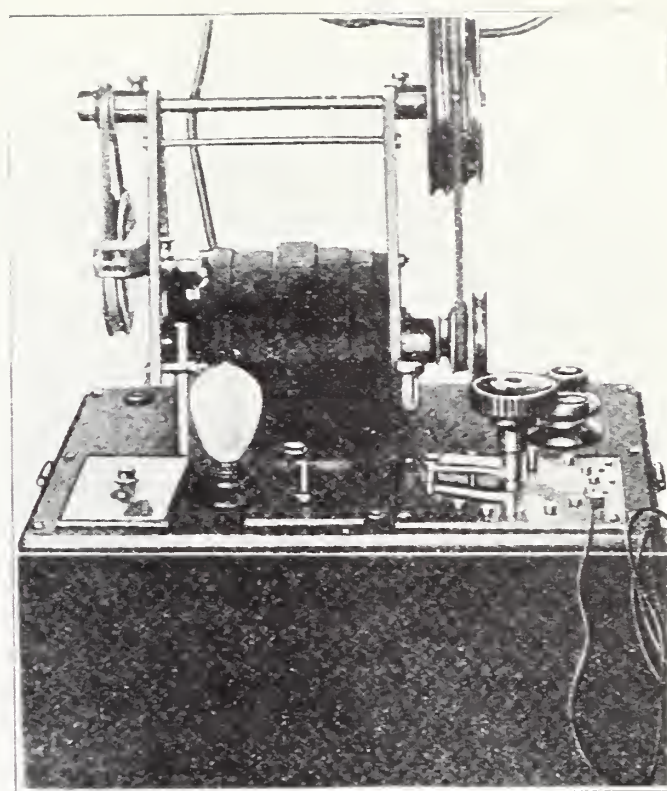
excellent article in 1907 on the use of electricity in medicine.⁴ His electrical interests and his diagnostic interests led to publication of his electronic theory of disease in 1917.¹⁰ He called his theory the "Electronic Reactions of Abrams," or E.R.A. His theory held that the human body possessed a characteristic rate of electronic vibration in health and disease. The type, severity, and location of any disease could be determined by measuring the perturbed vibratory rates. The vibratory rates were measured by instruments designed by Abrams. Drugs also possessed a characteristic vibratory rate, corresponding to the rate of the disease for which they were used. After the Abrams' practitioner had diagnosed the disease, it was treated by another Abrams' machine, the oscilloclast, which made the use of drugs unnecessary. The oscilloclast was set to the vibratory rate of the disease to be treated, and a "cure" would result. The treatment was likened to the shattering of a wine glass by sound vibrations.¹¹

A drop of blood, a piece of preserved tissue, or even a photograph or sample of handwriting was all that was needed for a diagnosis to be made, because they all possessed the vibratory rate of the diseased person. The diagnostic machinery consisted of a dynamizer, a rheostat dynamizer, a vibratory rate rheostat, a strain rate rheostat, a measuring rheostat, and a proximal electrode.¹² The sample to be



Typical E. R. A. diagnostic equipment set up and ready for use. The reagent stands on the left ground plates, facing due west, with the proximal electrode on the forehead

(Fig 1) Reprinted with permission. Copyright (c) 1924 by Scientific American, Inc. All rights reserved.



(Fig 2) Abrams' "oscilloclast" as pictured in *Physico-Clinical Medicine*, June, 1919.

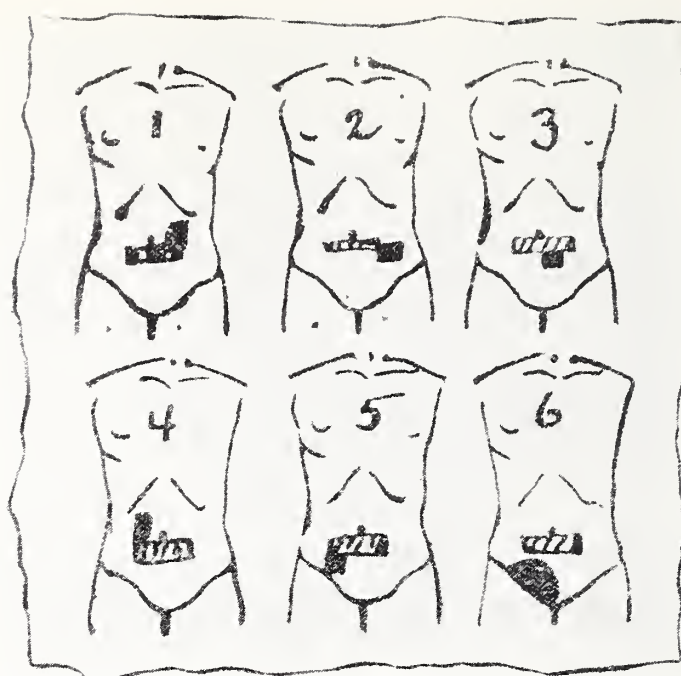
measured was placed in the dynamizer. During diagnosis, it was necessary to have the room darkened. The emanations from the sample passed through the various machines to the proximal electrode, which was connected to the forehead of a healthy subject, or "reagent." The reagent was usually an employee of the diagnostic laboratory. It was imperative that the reagent be facing west during the tests, with his feet resting on the ground plates and his arms held out at his sides to prevent "shorting out." (Fig. 1) The reagent was first treated with a horseshoe magnet to remove any extraneous vibrations. The apparatus could be adjusted to various settings corresponding to different diseases. At each setting, the Abrams' practitioner would percuss the reagent's abdomen to determine the areas of dullness. By changes in the areas of dullness at different settings of the electrical equipment, the diagnostician could deduce the diseases affecting the person who provided the sample.¹² Diseases most commonly diagnosed were syphilis (euphemistically called diminished resistance), tuberculosis, and cancer. It was not uncommon for a seemingly healthy person to have all these diseases and others, but the patient was quickly reassured that the prognosis was good. All that was required for a complete cure was a few sessions with the oscilloclast and payment of a modest fee. (Fig. 2)

At first, Abrams' theories gained little recognition, but the popularity of E.R.A. gradually increased as articles about Abrams and his theories began to appear in the popular press. *Pearson's Magazine* contained articles praising Abrams and advertising for his devices. According to this publication, E.R.A. was the greatest medical discovery of the age.¹³ Well known author Upton Sinclair became a staunch supporter of Abrams, and after a visit to the Abrams laboratory in San Francisco, wrote an article called "House of Wonders" which appeared in *Pearson's Magazine* in June, 1922.¹⁴ Sinclair also defended Abrams' practices in a letter to the Editor of the *Journal of the American Medical Association*, who published it with a rebuttal.¹⁵ Sir James Barr, a past president of the British Medical Association, also became an Abrams supporter.¹⁴

Meanwhile, Abrams had withdrawn from his local medical society and the American Medical Association.¹⁶ Abrams had established his own journal, *Physico-Clinical Medicine*, to promote his ideas and advertise his machines. He gave four-week courses in electronic medicine for a fee of \$200. Various diagnostic devices were offered for sale, but the oscilloclast was only available on a rental basis for an initial fee of \$200-250 and a monthly payment of five dollars. The user agreed not to open the machine and inspect its contents.⁴

During this period, Abrams' claims became even more absurd. For example, he claimed that he could determine the religion of an individual from a drop of blood, from which the electronic reactions resulted in areas of abdominal dullness in a "reagent" subject in the laboratory.^{12, 17} A chart showed the specific dullness areas which indicated various religions. (Fig 3). Abrams also published a diagnosis of the handwriting of various deceased individuals, including Edgar Allan Poe (congenital syphilis and dipsomania), Samuel Johnson (acquired syphilis and tuberculosis), and Bret Harte (Jewish on father's side and congenital syphilis).¹¹ Abrams also claimed his machines could determine the paternity of a child, and at least one of his diagnoses was accepted in court.¹

Abrams' popularity reached the point where various medical journals felt compelled to denounce his practices. Editorials and investiga-



(Fig 3) Reproduction from *Physico-Clinical Medicine*, September, 1922. This chart represented the areas of dullness in the "reagent" which were claimed to indicate the religion of the tested individuals. 1 represents the areas of dullness for a Catholic; 2, Methodist; 3, Seventh Day Adventist; 4, Theosophist; 5, Protestant; 6, Jew.

tive reports appeared in the *Journal of the American Medical Association*, *Lancet*, *Boston Medical and Surgical Journal*, and others. *Scientific American* undertook an investigation which resulted in a series of twelve articles published monthly from October, 1923, to September, 1924. The final article declared E.R.A. and electronic medicine utterly worthless. "At best, it is an illusion; at worst it is a colossal fraud." The report went on to describe E.R.A. as the work of a mastermind. "It is far more intricate and ironclad than medical fads of the past. It deals with a new form of energy"¹⁸ In Abrams' own words, "the spirit of the age is radio, and we can use it for diagnosis."¹⁹ Indeed, radio was new and poorly understood by the public. The prospect of using it to diagnose and cure disease in an easy and painless way, without the use of unpleasant drugs or surgery, must have seemed attractive to a gullible public.

OK E.R.A.

Abramsism had spread over the entire country, and Oklahoma had its share of E.R.A. practitioners. The *Journal of the Oklahoma State Medical Association* carried at least three editorials concerning Abrams and E.R.A.²⁰⁻²² From these editorials, we learn that "Oklahoma City, Muskogee, Tulsa, Shawnee, and other centers house the criminal fakirs in this

field." The Abrams followers in Oklahoma were sometimes "eclectics, ex-ministers, osteopaths," but also members of our medical profession, in every case those generally known to the rank and file of their associates as "woefully unqualified and unfitted to assume the place of worth or respect, but unfortunately accepted by the victim of disease by reason of their recognition by the laws of Oklahoma as persons of honor and worth." At least one "reputed osteopath" in Tulsa, Oklahoma, who was a disciple of Abrams, was taken to court for damages resulting from the fraudulent diagnosis and harmful treatment of syphilis and cancer of the colon.²³ In January, 1923, two members of the Tulsa County Medical Society were expelled because they were local exponents of the Abrams methods.²⁴

In 1922, Dr J. E. Hughes of Shawnee, Oklahoma, sent a sample of blood to the Physico-Clinical Laboratory for the Electronic Reactions of Abrams in Oklahoma City. This laboratory was operated by J. W. Eisiminger, an osteopath. This incident was reported in the *Journal of the American Medical Association*. Hughes received the following diagnosis from Eisiminger:

Congenital diminished resistance, cerebrospinal and digestive strain, 39 ohms, Metastatic Carcinoma. 6 Liver and right colon, Tuberculosis Genito-urinary tract, 6 ohms. Colisepsis. 4 ohms. streptococci, infection, 12/25 ohms in gall bladder region.

In the words of the *Journal*, "If . . . [you] are not quite sure what it means, do not blame *The Journal*, we don't [know] either . . . One gets the impression that the patient was in bad shape." Then it was revealed that the blood sample "was not from Mr. P_____, whose history was sent with it, but was obtained from one of our unsuspecting and believed-to-be virtuous female guinea-pigs. The pig was duly arranged facing west when the blood was taken." Dr Hughes concluded that a great injustice was done to the guinea-pig family.¹⁷

Another sample, this time sheep's blood, was sent to Eisiminger by Dr L. J. Moorman of Oklahoma City. The sample was accompanied by the history of a fifteen-year-old boy. The diagnosis received was congenital syphilis, metastatic carcinoma of the left lung and pancreas, and Neisserian infection and tuberculosis of the genito-urinary tract. Eisiminger offered to guarantee a cure for \$250.¹⁷

After the publication of the *Scientific American* verdict, the *Journal of the Oklahoma State*

Medical Association declared that there was now ". . . no reason why every practitioner, advertiser, quack or culturist operating this device to the injury of the helpless may not be prosecuted just as any other fraudulent operator may be brought to justice."²²

THE END

Early in 1923 about 3,500 health practitioners were using the E.R.A. equipment, and many more were using different apparatus developed according to the same theories. At the height of the electronic craze, there were 44 types of pseudo-scientific instruments based on the reaction of Abrams.¹⁸

Abrams died of pneumonia in 1924 while *Scientific American* was in the midst of its investigation. He left an estate of over two million dollars, a hard corps of disciples, and an organization which he founded called the American Association for Medico-Physical Research.^{19, 25} With the death of its leader, electronic medicine quickly lost its momentum. In 1927, Morris Fishbein wrote that although Abrams' heirs continued to promote Abramsism in San Francisco, "the handwriting on the wall indicates the cult lacks the master hand of its egocentric leader. Abramsism is to be credited with the most rapid and conspicuous rise and fall of any cult of our modern period."²⁶

WHY?

A promising career had ended in fraud and disgrace. One can only speculate as to what went wrong in this man's life. The monetary rewards of successful quackery seem to have been part of the reason, although Abrams frequently denied this was his motive. His policies regarding lease of his oscilloclast and his steep fees for clinical courses seem to contradict his denials. The financial rewards cannot totally explain Abrams' actions, however. Early in his career he had established a large and well-paying practice, and he was from a wealthy family.

Perhaps this intelligent and ambitious man was frustrated in his attempts to attain greatness by orthodox means. Perhaps he desired to discover something that would change the course of modern medicine, and in his zeal lost his sense of judgment. He may have seized the electronic theory of disease as his great discovery, and possibly believed in it to the end, despite the abundant evidence against it. □

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REPRINT REQUESTS

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DATES TO REMEMBER

- Board of TrusteesFebruary 11th, 1978
(OSMA Headquarters)
- Council on Planning and
DevelopmentMarch 3rd-5th, 1978
(Oklahoma City)
- Oklahoma Medical SummitMay 3rd-6th, 1978
(Oklahoma City)



News From The Oklahoma State Department of Health

The Revised Communicable Disease Reporting System

The Oklahoma State Board of Health approved a revision of the list of reportable diseases on 9-10-77. The revision removed those diseases which are not amenable to public health control measures. When one of these diseases is diagnosed, the physician needs to consider the occurrence of infection in others and report the case.

Epidemics and potential problems are uncovered by such reporting. Containment of communicable disease requires recognition of its occurrence and recognition is effective only by conscientious reporting by the professional community. ☐

REPORTABLE DISEASES IN OKLAHOMA

I	II	III
Botulism	Amebiasis (<i>E. histolytica</i>)	Aseptic Meningitis
Cholera	Anthrax (<i>B. anthracis</i>)	Brucellosis
Diphtheria	Leptospirosis (<i>Leptospira sp.</i>)	Congenital Rubella Syndrome
Human Rabies	Meningococcal Infection	Encephalitis
Malaria	(<i>N. meningitidis</i>)	Measles (Rubeola)
Plague	Tuberculosis	Hepatitis (A, B, Unspecified)
Poliomyelitis	(<i>M. tuberculosis</i>)	Meningococcal Infections
Smallpox	Pertussis (<i>B. pertussis</i>)	Rocky Mountain spotted fever
Tetanus	Salmonellosis (<i>Salmonella sp.</i>)	Rubella
Typhoid	Shigellosis (<i>Shigella sp.</i>)	Tuberculosis
Yellow Fever		Tularemia
		Unusual syndrome, or uncommon disease

Venereal Disease — Use Report Form No. ODH 228

- I. Designates serious diseases which require immediate action by the Epidemiology Program and mandates immediate notification of health department by anyone who encounters the organism or the disease.
 II. Designates organism to be reported by clinical laboratories.
 III. Designates diseases to be reported by physicians.

COMMUNICABLE DISEASES IN OKLAHOMA FOR OCTOBER, 1977

DISEASE	October 1977	October 1976	September 1977	Total To Date 1977	1976
Amebiasis	3	1	3	20	13
Brucellosis	—	—	—	3	7
Chickenpox	15	38	11	947	1641
Encephalitis, Infectious	1	2	—	12	17
Gonorrhea (Use Form ODH-228)	1214	1126	1166	10895	11168
Hepatitis, A, B, Unspecified	95	93	52	716	1147
Leptospirosis	—	—	—	1	1
Malaria	—	1	—	—	3
Meningococcal Infections	1	—	—	14	21
Meningitis, Aseptic	21	12	9	71	31
Mumps	38	47	14	546	757
Rabies in Animals	19	24	15	222	158
Rheumatic Fever	—	2	—	3	13
Rocky Mountain Spotted Fever	5	3	5	71	90
Rubella	2	3	2	33	73
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	5	5	3	66	298
Salmonellosis	69	22	49	305	222
Shigellosis	14	5	17	67	168
Syphilis, Infectious (Use Form ODH-228)	7	5	8	72	89
Tetanus	—	—	—	—	—
Tuberculosis, New Active	23	55	24	264	339
Tularemia	1	—	2	12	7
Typhoid Fever	—	—	—	2	1
Whooping Cough	7	1	3	16	20

Emergency Medical Services as a Model For Rural Health Care Delivery

C. Thomas Thompson, MD, FACS
James E. Lewis, PhD

The problem of providing adequate health care for rural America has plagued the political world of governors and legislators as well as health planners since the centralization of medical care into more urban areas has occurred. Numerous efforts to entice health manpower into the country by subsidy have not been notably successful. The educational emphasis in the primary care fields and family practice residencies have not yet shown that physicians will go into the rural areas in large numbers. There are many reasons for this, including less than desirable facilities, community attitudes which are not attractive, and the general orientation of most young physicians to the larger communities and technically sophisticated institutions.

Providing emergency services for rural areas is difficult because of time and distance as well as general lack of manpower and facilities. It seems ridiculous to plan for comprehensive medical care for underserved rural areas when essential life saving services are not available. It is obvious that the backbone of *any* health

delivery system would be an emergency plan to take care of the acutely ill and injured. On this framework could then be built more sophisticated services as they are desired or warranted.

There are many difficulties associated with health planning. Previous experience with the Comprehensive Health Planning Agencies, Regional Medical Programs and Hill-Burton efforts should attest to the general failure of government efforts to systematize health care. The maze of changing federal "guidelines" which many times subvert the original intent of a bill, the changing personnel who represent "consumers" and the artificial geographic boundaries are but a part of the problem. The natural flow of patient and medical services simply does not always fit the boundaries of the H.S.A. The American citizen likewise resists being told precisely where he must go for medical services. Perhaps Idi Amin could make an H.S.A. work, but he probably could not qualify as a health planner in Oklahoma.

Stimulated by Regional Medical Program support several successful health projects are still in existence in Oklahoma. There is an extensive teleconference network which links many hospitals for educational and administrative purposes. The remote cardiac monitoring system linking small hospitals to larger institutions remains a model for the nation.

Shared service corporations for small hospitals also are still present. The fact of their continued existence attests to the value of the voluntary programs even after all federal funding has been withdrawn.

The more recent efforts to plan for emergency services have not met with universal success. The magical fifteen components to be addressed have been stumbling blocks or become parts of "paper plans" which have little to do with real medical care. The chief objection has been largely one of imposing a theoretical model of "ideal" emergency care on a less than enthusiastic populace. While universal access numbers, paramedic programs and transfer agreements may seem simple indeed in Jacksonville, Florida, the problems presented to rural Oklahomans are overwhelming. It would seem more reasonable, then, to build a simple system which could survive when the dollars from Washington diminish and in which the needs of the people could be met without the bureaucratic and administrative management problems of an imposed "system."

The thesis of this paper is that essential emergency services may be provided if the plan is predicated on the voluntary participation of rural communities, larger hospitals and the very valuable volunteer health and service organizations. The ingredients of a system that could work are:

- (1) The small community which needs help.
- (2) The "helping hand" or cooperating hospital.
- (3) The physician.
- (4) The volunteer health agencies and service organizations.
- (5) An organization which could provide management, coordination, and auditing functions—in short, a management team.

Small communities and rural areas in Oklahoma vary widely in available health manpower and facilities. It would be the absolute responsibility of a community to assess its resources and plan to make maximum use of its potential. The enthusiasm generated in a small community which is given the opportunity to *help itself* can be magnificent. This has been proven on many occasions in the process of training nearly 5,000 emergency medical technicians in the past five years.

There are many little towns where there are not health professionals and perhaps only sparse or volunteer police and fire services.

The major efforts then should be made in training and identifying a "health station."

Training could be given at several levels—

(1) A cadre of citizens could be trained in cardiopulmonary resuscitation (CPR) and other life saving techniques. A goal of one trained person per family might be set.

(2) "First responder" courses for police, fire and rescue personnel.

(3) Emergency medical technician training for any or all of the above. Where high quality ambulance services with trained EMT's are not available, it would be desirable to upgrade citizen and first responder training to the EMT level.

(4) Upgraded skills training for any health professionals in the area, eg, nurses, ex-corpsmen, pharmacists who are physically able.

This group of trainees would act as the cadre for medical self help in the town but even more importantly, they could be the enthusiastic supporters of the "system."

The identification of a "health station" for the town is vital. This station should be the point of access for the citizen in distress as well as the focal point for seeking help from the affiliated metropolitan hospital. The station may be in the police or fire facility, city hall, or any area properly identified and publicized. It must offer twenty-four hour communication by telephone or radio or both, manned by emergency personnel (police, fire or volunteers).

Communities with small hospitals present special problems. Most rural hospitals are faced with the ever present danger of closing and the ever increasing burden of complying with myriad regulations and guidelines. Even the countless questionnaires simply overwhelm the small institution. Fluctuating occupancy rates, cashflow problems and difficulty maintaining quality professional people are a constant anxiety. This is an area, then, where a larger hospital with its many services—medical, paramedical, and administrative

Dr Thompson received his MD from Harvard Medical School and is a Tulsa general surgeon. He served as chairman of Oklahoma's Committee on Trauma from 1966-74.

Dr Lewis received his PhD in economic and urban geography from the University of Georgia. He is the dean of the University of Oklahoma Tulsa Medical College.

might indeed serve a very useful purpose if it can foster a close relationship with the smaller institution.

The larger hospital which wishes to assume the responsibility of helping one or more communities plays a large role in developing the system. It must provide a twenty-four hour service which can take the total responsibility of directing the care of the ill and injured patient. This service includes coordinating communication, transportation and information. If highly specialized care such as burn, neonatal or cardiac surgery is not available in the assisting hospital, proper arrangements must be made for dispatch and admission to another institution. In short, the needs of the small community must be met with an effective response—one call, one answer.

In addition to the obvious need to provide emergency service, the most important responsibility of the assisting hospital will be in the educational and counseling area, as well as providing the doctors, nurses and administrators for continuing education at all levels. When the system starts to work these people will come to know each other, and this personal relationship can be vital in the continuity of care for the patient!

It is essential to obtain the enthusiastic support of the physician if this program is to be successful. In the rural community the physician is overworked, anxious to keep up to date on recent medical advances and wary of all attempts to curb his independence. Genuine service can be provided to this physician in the way of educational opportunity to meet changing requirements as well as guaranteed access for high quality emergency care for his patients. This proposal in no way prevents the rural physician from referring in his traditional pattern but can enhance the personal relationship. In many communities there are pluralistic referral patterns, both physician and institutional. This simply provides a mechanism which will be in place at all times for emergency care.

The urban physician will gain in such a system. No longer can one grumble about the case referred in "too late" or "messed up" if he has been in on the advice from the beginning. Here is an opportunity to extend the arm of sophisticated medical care to patients in rural Oklahoma.

The volunteer health agencies and service organizations can be of enormous help in developing this program. The American Red Cross has a long and illustrious record in training. The American Heart Association and its Oklahoma Division has particular interest in CPR training. The Oklahoma Trauma Research Society has been training emergency medical technicians for years using volunteer doctors and course coordinators. First responder, rescue and extrication training could easily be a part of this program.

Service organizations and clubs—Rotary, Lions, Kiwanis, Optimists, etc., have frequently been the cutting edge of developing new community programs. Publicity and support from these community-oriented organizations would be necessary.

Who then should run such a program? If the voluntary thesis is valid, it cannot be government. As is true of any voluntary and cooperative activity, the essential ingredient for success is an organization with no vested interest to handle the management, coordination and audit/evaluation functions. In order that it can carry out its responsibility for seeing that each partner meets its responsibilities, the important characteristics of this organization include:

- (1) Strong educational ties across the health professions;
- (2) A commitment to a broad area of the state, if not the whole state;
- (3) A broadly representative governing board including community representatives, health professions educators, and health professionals;
- (4) A diverse financial base so as to insure independence;
- (5) A small professional staff;
- (6) Potential, if not actual, respect from health professionals, hospitals and communities.

The functions of the management team are fundamental to the success of the program. In broad terms they include standard setting, education and training and auditing performance. The value of the broadly representative board becomes clear then in terms of correcting, through suasion, coercion, or education, performance that fails to meet the standards established by the participants in the program. The functions include:

- (1) Develop and test a community inventory or self-assessment guide;

(2) Design a standard information system that is appropriate to the audit/evaluation responsibility;

(3) Develop and test a hospital self-assessment guide;

(4) Develop criteria for community/hospital matching and model letters of agreement;

(5) Provide continuing education to health professionals in cooperation with "helping hand" hospital;

(6) Develop and test an inventory and self-assessment guide for educational and training capabilities of voluntary health agencies;

(7) Develop and review standards of performance for participating groups and institutions;

(8) Audit/evaluate performance of participating groups and institutions;

(9) Conduct education and training programs as appropriate to bring performance levels up to standard.

Each community/hospital agreement could be tailored to fit their respective needs and capabilities. The organization's task is to assure that each party meets its commitments at an acceptable level of performance.

SUMMARY

In this brief paper we have identified the ingredients and outlined the interrelationships necessary to provide a voluntary, cooperative arrangement within which communities and hospitals can match their needs and capabilities so as to meet, at minimum, the

emergency medical service needs of the state's small towns and rural areas.

If indeed, the citizens of an area of Oklahoma can provide a mechanism which will care well and reliably for the acute heart attack, the tractor accident, the rural auto accident, the severely burned or poisoned child, this simple approach will outdo any sophisticated plan imaginable. Accomplishing this would demonstrate Oklahoma's ability to develop and implement solutions to its rural emergency medical service delivery problems while providing the structure or framework from which other gaps in rural health care delivery could be met.

When our simple but vital emergency needs are met, can we not also visualize . . .

(1) Periodic clinics (weekly or so) using primary care residents at any identified health station;

(2) Screening clinics for special problems, *eg* diabetes, cancer, hypertension, ocular, *etc.*

(3) Paramedical people identified in each community such as physician assistants, nurse practitioners, *etc.*

(4) Health educational programs with particular emphasis on self-help.

It is time to recognize that we cannot afford to await the large federal programs which frequently promise more than possible to deliver. If the problems of rural health delivery are to be met in Oklahoma, then it will be done by Oklahomans in a voluntary system. We believe that the best and simplest approach is to build a system upon the framework of emergency services. □

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Trustees Approve Building Project

After lengthy discussion and debate the Oklahoma State Medical Association's Board of Trustees has approved the construction of a new 3,900 square foot building which will house the Oklahoma Foundation for Peer Review (OFPR). The OFPR, which administers the Oklahoma Utilization Review System, is currently housed in OSMA headquarters. The OURS plan has received tentative approval as the model for Oklahoma's PSRO, and therefore additional OFPR staff will be required. The OFPR and the Board of Trustees were faced with either constructing a new building or having the OFPR rent office space away from the OSMA. It was felt that the advantages of a close OSMA-OFPR relationship were sufficient to justify the construction of the \$160,000 facility.

Debate on this construction project revolved around two issues. One, should the OSMA assume such a debt in order to construct the building, and two, does the Board of Trustees have the authority to approve such a project. OSMA trustee, Dr Ed Norfleet, Tulsa, told the Board that he was not opposed to the project *per se*, but he said he did not feel that the Board of Trustees had the authority to make the final decision. Dr Norfleet recommended that the building project be deleted from the Board agenda and be referred to the House of Delegates. After considerable discussion, Board Chairman, Dr J. B. Eskridge, III, ruled that the trustees did have the authority, and his ruling was upheld by the Board. Dr Norfleet then withdrew his motion to refer the matter to the House and the construction project was formally approved.

Construction on the building, which will be situated in the northeast corner of the OSMA's plot, will begin as soon as all the details can be worked out.

In other action the trustees also formally endorsed the proposed OSMA endowment of a professorial chair in continuing medical education. This program, which was endorsed at the September meeting of the Council on Planning

and Development, calls for a voluntary three-year endowment program with an annual contribution of \$200 per participant. Lee Teague of the University of Oklahoma Health Sciences Center appeared before the Board to explain the endowment program and to urge its adoption. Although the program has been approved by both the Council on Planning and Development and the Board of Trustees, it still must receive the approval of the House of Delegates in May.

As expected, the Board also approved the OSMA medical liability insurance program offered by the Hartford Insurance Company for 1978. As previous newsletters and *Journal* articles have pointed out, the OSMA Council on Members Services negotiated the insurance program with both the Insurance Company of North America and the Hartford. The proposal offered by the Hartford was substantially lower than that which was available through the INA and Lloyd's of London. Therefore, the Council on Members Services approved the Hartford program some time ago, and the Board also gave its approval. Hartford representative Dick Thomas told the Board that through the Hartford program Oklahoma doctors will probably have the lowest insurance rates in the country.

The Board also voiced its absolute opposition to new health planning guidelines which were published in the September 23 *Federal Register*. In a telegram sent to the federal Office of Planning, Evaluation and Legislation and to all members of the Oklahoma congressional delegation, the Board said the new guidelines would create chaotic conditions in Oklahoma, especially in our rural hospitals. The telegram pointed out that constructive/voluntary programs initiated by Oklahoma physicians and our state legislature are solving distribution and over-utilization problems in this state. It said the new federal guidelines would destroy all the progress made by these voluntary efforts and would discourage the decentralization of medical education and the out-migration of young physicians from metro areas. The telegram stated that the OSMA Board of Trustees was "opposed to the implementation of the regulations"

In other action the Board also:

*Received a report on the new Oklahoma Worker's Compensation Law from Industrial Court Judge Chris Sturm. Judge Sturm told the Board that the new law no longer requires

physicians to make a subjective disability judgment but rather calls upon them to make the more scientific judgment of impairment. He urged the OSMA to assist the industrial court in adopting appropriate guidelines to be used in judging impairment.

*Received the report from the Secretary-Treasurer, Dr Armond Start. Dr Start said that although the treasurer's report at this point did not show a deficit, he expected additional expenditures before the end of the fiscal year, and he predicted, as was pointed out to the House in May, 1977, that the OSMA will incur a \$30,000 deficit in fiscal year 1977-78.

*Approved a resolution to be introduced before the AMA House of Delegates meeting in Chicago calling upon the AMA to support the Oklahoma Utilization Review System as a possible prototype for utilization review throughout the nation.

*Approved an OSMA position paper on National Health Insurance which was featured in the November *Journal*.

*Approved other OSMA resolutions to the American Medical Association which were described in the December *Journal*.

*Received a report from Dr Robert McLaughlin, chairman of the OSMA Physicians Committee, on a new procedure now being used to give assistance to troubled physicians. The new procedure is based upon a cooperative effort of both the Physicians Committee and the Physicians Review Panel, which was reorganized during the past year.

*Approved continued support and sponsorship of the "Ability Counts" essay contest which is a part of the Governor's Committee on Employment of the Handicapped. Board chairman, Dr Eskridge, explained that the OSMA annually contributes \$250 to the "Ability Counts" contest, and the Board unanimously approved the continued support of this program.

*Voted to forward the names of Dr Stephen Parks and Dr George Smith as nominees for the HSA Board District 5 vacancy. Dr Jack Fetzer, Woodward, had served in that capacity, but due to severe time constraints has chosen not to accept reappointment.

*Unanimously voted to oppose the American Medical Association's and the American Bar Association's position on decriminalization of marijuana. A recent AMA-ABA position paper on marijuana called for use of the substance to be decriminalized.

*Received a report from Ed Kelsay, executive director of the Oklahoma Foundation for Peer Review. Kelsay said that the OURS plan had received tentative approval as the PSRO model for Oklahoma and that he was 99% sure that the OURS program would be formally accepted. He presented cost-savings figures (detailed in the December *Journal*) which show that the OURS program not only costs less to administer but also will save more dollars per capita than any other program currently in use.

The Board also gave Dr Rex E. Kenyon an appreciation plaque for his many years of dedicated service and a standing ovation (see story in this issue). Dr Kenyon, a former OSMA president, is currently president of the American Medical Political Action Committee and has served both the OSMA and the AMA in various capacities.

The next OSMA Board of Trustees meeting is scheduled for February 18 at OSMA headquarters in Oklahoma City. □

Court Holds Surgeon Accountable

The Minnesota Supreme Court has ruled that a surgeon who performed an ineffective vasectomy can be held responsible for the costs of raising the unplanned child.

Although the Court warned of possible psychological damage to "unwanted children," it ruled in an October decision that there was little question that parents could recover all medical expenses of a pregnancy and birth and also ruled for the first time that child-rearing costs can also be considered. This can include the cost of maintenance, support and education up to age 18, the Court said. In the five-two decision the Supreme Court reasoned: "Where the purpose of the physician's actions is to prevent conception or birth, elementary justice requires that he be held legally responsible for the consequences which have, in fact, occurred."

The ruling involved Eugene and Joyce Shurlock of Afton, Minnesota, a suburb of St. Paul. Shurlock underwent a vasectomy in 1970 after the couple's 7th child was born. The Shurlocks' 8th child, a boy, was born in 1972. The Shurlocks then brought suit against both the clinic and the surgeon. □

CPR Program Approved

The OSMA Council on Public and Mental Health has formally approved a statewide training program of cardiopulmonary resuscitation. The program will begin February 1, 1978, and will be cosponsored by the Oklahoma Chapter of the American Heart Association. It emphasizes local physician participation in setting up and conducting local training programs in CPR.

During late December and early January members of the Council on Public and Mental Health will contact all county medical society presidents to explain the CPR program and to encourage the participation of county medical societies. A list of participating county medical societies will be provided to the Heart Association, and at that point Heart Association field representatives will begin working with local doctors in setting up dates and sites for the CPR training program. Instructors and train-

ing materials will be provided by the Heart Association and promotional efforts will be handled by the OSMA. A new OSMA public service announcement on CPR is being considered as a part of the promotional efforts.

The CPR courses will be approximately three and a half to four hours in length and will take place throughout 1978. Since a limited number of training mannequins is available, course dates chosen by county medical societies must be confirmed by the Heart Association.

Council chairman, Dr Armond H. Start, called this "an opportunity for physicians to show once again that they are concerned about and interested in the health of the Oklahoma public."

He urged county medical societies to adopt this as one of their projects for 1978, and he further urged local physicians to take advantage of a separate CPR training course for physicians. According to Dr Start, the separate course is being made available so that physicians can sharpen their CPR techniques. □

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Cost Commission Calls for Changes In Health Care System

A 27-member National Commission on the Cost of Medical Care has called for major changes in the American health care system in order to restrain costs.

"After years of consumers wanting unlimited care; governments' promoting growth in the production of both providers and facilities; and physicians' providing services based solely on quality, it is necessary to instill alternative behavior in everyone. Changes of the magnitude necessary are best developed through the combined efforts of decision makers from the areas where health care is purchased, delivered and used," the Commission report declared.

The Commission examined two alternative approaches to the issue of cost containment . . . strengthening consumer and provider cost consciousness and expanding regulatory measures. It concluded that:

"A process of strengthening price consciousness combined with complementary regulatory schemes will lead in terms of cost, quality and access to an optimal program of health care delivery."

The Commission made 48 specific recommendations in its 30-page report which was made public in early December. These recommendations, directed at medical professionals, consumers, the health insurance industry, and the government, include:

MEDICAL PROFESSION

*Physicians, hospitals, insurers and others should work at the local level to agree on reasonable levels of reimbursement.

*The hospital industry should institute a structured, voluntary cost constraint program based on periodic review and public notice of all hospital expenditures exceeding a predetermined, acceptable limit.

*The medical profession should develop and disseminate guidelines for appropriate care based on criteria of medical necessity, quality and cost benefit.

CONSUMERS

*Employees should be able to choose among a number of health care programs and benefit from any savings through selection of a less costly program.

*Insurance policies should include provi-

sions through which the consumer shares in the cost of care received at the time of service for selected benefits and for selected costs.

HEALTH INSURANCE INDUSTRY

*Private and government insurance benefit packages should provide balanced coverage of alternative services and settings in the provision of medical care and should restrict reimbursement for health services provided in inappropriate settings.

*Payment to institutions on the basis of prospectively determined rates should be explored and implemented as their effectiveness becomes clear.

*Organizations financing health care services should be certified at the state level on the basis of financial soundness, and plans should be routinely monitored by the same agency to guard against misrepresentation of costs or benefits.

GOVERNMENT

*If controls on revenues, capital, acquisition, prices, etc. are expanded, attempts using carefully controlled experiments should be made to evaluate the effects.

*Regulations whose rational is cost containment should exempt organizations or areas where innovations are being tested for the purpose of cost containment or where strategies to increase price consciousness are being successfully pursued.

*Develop criteria for the placement of expensive facilities and capital equipment for use by state and local health planning agencies. The criteria should be developed with the cooperation of expert health professionals, including providers and government, and should be flexible enough to meet specific needs of individual states and localities.

The Commission report was completed less than one week before the Chicago meeting of the AMA House of Delegates in early December, and is expected to receive full discussion at the June meeting of the House. Although the Commission was appointed by the AMA Board of Trustees and was chaired by former AMA President, Max H. Parrott, MD, AMA Executive Vice-President, Dr James H. Sammons, was quick to emphasize that the Commission "has been and is an entity unto itself."

Dr Sammons stressed that "the report at this point is just that: the report of the Commission.

It is controversial; parts of it run contrary to present AMA policy; I expect . . . and I hope . . . it will generate constructive debate throughout the profession to arrive at solutions to unprecedented problems."

The Commission report, which was drafted by representatives of business, labor, government, consumer groups, academia and various components of the health care system, is expected to receive the scrutiny of various OSMA councils and boards. Physicians interested in studying the Commission's recommendations further are referred to a summary report which was featured as an insert to the December 5, 1977, issue of American Medical News. □

Medical Examiner Enjoined From Performing Autopsy

An autopsy may not be performed over the religious, ethical or philosophical objections of a decedent's family, absent a showing of a genuine necessity for such procedure, a New York trial court ruled.

A 66-year-old woman died in a hospital less than an hour after being struck by an automobile while crossing the street. Her husband and family were members of the Orthodox Hebrew faith, which prohibits dissection of a human body after death. When the family learned that the county medical examiner intended to perform an autopsy on the body, a proceeding to enjoin the procedure was commenced.

At a hearing, an assistant district attorney stated that there was no evidence to indicate any criminal conduct on the part of the driver of the automobile. The medical examiner wished to perform an autopsy merely to determine the precise cause of death. Granting the petition for an injunction, the court found that the medical examiner's desire to determine whether the victim died by reason of injury to one vital organ as opposed to another was far outweighed by the family's reasons for opposing the autopsy.

The court said that in the absence of criminal charges, the family should not be made to suffer the additional grief of transgressions against their religious beliefs. □

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Congressman Jones Appears At Tulsa Health Forum

Predicting that passage of any type of National Health Insurance legislation during 1978 is remote and highly unlikely, Congressman Jim Jones of the 1st Oklahoma District opened the second OSMA Health Forum in Tulsa. The forum was held December 2 at St. John's Medical Center with approximately 55 Oklahoma physicians in attendance.

Congressman Jones said that a year ago he would have bet that some type of national catastrophic health insurance would be passed in either 1977 or 1978. Congressman Jones said now, however, that it looks highly unlikely. He predicted little if any chance for passage of comprehensive National Health Insurance any time soon.



Congressman Jones said he also felt that if a form of hospital cost containment was approved, approval would not be given until mid-1978. Even then, he said, it will probably be a different version from that which was endorsed by the Carter Administration. Congressman Jones also told Oklahoma physicians that welfare reform had only about a 50-50 chance of being passed in 1977, and he predicted correctly that a social security bill would be approved while an energy bill would not.

The series of health forums is a project of the Council on Governmental Activities, and eventually all congressmen and senators will participate. Watch for future *Journal* stories and special notices for details about the next Health Forum. □

Walter E. Brown, MD, Honored

Walter E. Brown, MD, Tulsa, was recently elected Fellow Emeritus by the Board of Chancellors of the American College of Radiology. Dr Brown served as President of the Oklahoma State Medical Association in 1960-61.

Emergency Medical Seminar To Be Held in Tulsa

Health care professionals from a four-state area will participate in a February 18 seminar on "Emergency Medical Services — The Rural Health Team" to be held at the Sheraton-Skyline East in Tulsa.

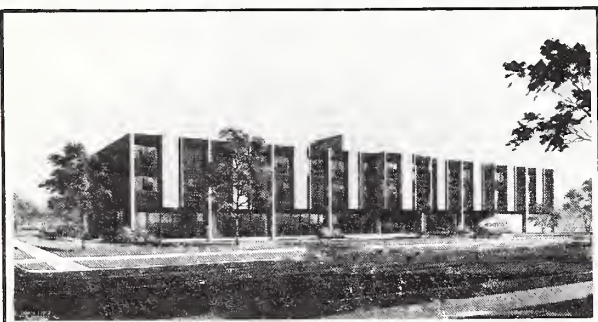
Gabrielle Thompson, coordinator for continuing education for the Tulsa Area Health Education Center, which is co-sponsoring the seminar with the University of Oklahoma Tulsa Medical College, explained, "Health professionals from Kansas, Arkansas and Texas were invited because they share the same prob-

lems in providing emergency health services in rural areas as we do in Oklahoma."

"The seminar will focus on the establishment of a team concept of emergency health care and delivery for rural areas."

Dr C. T. Thompson, clinical professor of surgery at OU-TMC, will moderate the morning session which will deal with the emergency medical services that can be established in small communities. Morning speakers will include Dr Henry Cleveland, University of Colorado Medical Center; Dr Robert Gillispie, chairman of the Trauma Committee of the American College of Surgeons; and Dr Robert Wilder, professor of emergency medicine at the OU Health Sciences Center in Oklahoma City.

Dr James E. Lewis, dean of the OU-TMC, will moderate the afternoon session which will focus on rural health care delivery systems. Speakers will include Dr Ira D. Trail, dean of the University of Tulsa College of Nursing; Dr Rodney Ice, dean of the OU College of Pharmacy; Dr Robert Graham, a member of the Bureau of Health Manpower, Washington, D.C.; and Gary Cook, board member of the Robert Woods Johnson Foundation. □



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General Medical Practice In The United Kingdom

General Medical practice has evolved over the centuries — From the closure of the Monasteries by King Henry VIII through the founding of the Royal College of Physicians in 1518, the separation of the Surgeons from the Barbers in 1540, The Royal Charter given to the Apothecaries in 1617, the National Health Insurance of 1912 to the National Health Service of today.

The Apothecary is the ancestor of the General Practitioner of today, originally a branch of the grocers, a purveyor of herbs and drugs which he concocted for the Physicians. Eventually after numerous law suits he won the right to advise and prescribe for his patients.

After Waterloo, the changing social pattern gave rise to the Apothecaries Act and the formation of provincial medical schools and with the increasing number of trained doctors, the General Medical Council was formed to supervise the training and discipline of doctors, thus protecting the public and the profession from the quack.

The end of the 19th century and the early 20th century saw the start of Club medicine followed in 1912 by the National Health Insurance Acts.

The National Health Insurance Scheme was largely copied from the German model. Its aim was to give every working man the right to care by a registered medical practitioner in the event of illness with necessary drugs free at the time of need paid for on an insurance basis funded by the recipient and his employer by stamping a card.

The care of families was still haphazard, some belonged to clubs, others paid at the time. Hospitals were not part of the Service but were largely paid for by Charity — the patient seldom had to pay.

In 1948, the National Health Service was inaugurated and the General Practitioner became responsible for 100% of the population; hospitals and the preventive service (Public Health Service) were included in the scheme of comprehensive medical care.

Note: Fifty-eight Oklahoma doctors returned recently from a rigorous one-week tour of Britain's National Health Service. Beginning in February, The Journal will feature articles describing what these Oklahoma physicians learned and what their impressions were of the NHS.

Unneeded Tests Escalate Hospital Care Costs

Routine ordering of chest x-rays and electrocardiograms for all patients admitted to the hospital is not necessary and is adding to the escalating cost of medical care, Dr Richard J. Jones declared in the December 12 *Journal of the American Medical Association*.

Dr Jones is director of the AMA's Division of Scientific Activities.

There is little doubt, he said, that the inclination to ever more elaborate testing has been fostered by third-party payment, which insures that neither the patient nor the physician suffers any loss, and perhaps gains a remote benefit from extra testing.

The situation is aggravated by the physician's awareness that he may be challenged in a malpractice suit as to why he did not order a certain test, so he may order beyond

medical requirements, the AMA executive pointed out.

"Much could be said about the need for teaching house officers and medical students the importance of economy in the planning of a medical workup and in the administration of treatment."

House doctors order many routine tests because they fear the criticism of the attending physician, who may question why a certain procedure wasn't done, said Dr Jones.

The routine ordering of tests is part of the reason why hospital costs are increasing so dramatically, he said.

"There is no doubt that routine testing does detect some early disease that would otherwise go unrecognized, but whether this prolongs life or even improves the quality of life in a substantial number of patients is the basic question. Should the answer be affirmative, then society will have to decide how many routine, normal tests are worth doing for a predictable reduction in illness and death." □

AMA Approves PR Resolution

When the AMA House of Delegates took up the business of organized medicine last month, four Oklahoma resolutions were among the items to be considered. After it was all over, one resolution had been approved, one had been defeated, and two had been referred to the AMA Board of Trustees for additional study.

As the December *Journal* pointed out, the OSMA has lobbied for some time with the AMA for a stronger public relations effort. A resolution was introduced in Philadelphia during the December, 1976, meeting calling for a bolstered PR program, and another resolution was introduced at the June, 1977, meeting in San Francisco. As a result of the San Francisco resolution, the AMA has now reorganized its PR efforts and appears to have given these activities more emphasis. The resolution, which was introduced before the House of Delegates last month in Chicago, praised the AMA for the program it had developed, called upon the House to endorse aggressive public relations as a method of informing the American public about the advantages of private medicine and called upon the AMA to continue these efforts as long as it is in the best interest of the public and AMA members.

Resolution 76, which was introduced by the OSMA through the Council on Planning and Development, called upon the American Medical Association to rescind its commitment to PSRO's, HSA's, Comprehensive National Health Insurance and all other programs "rightfully belonging to the purview of the AMA but grossly and maliciously usurped by the federal government."

This resolution was introduced as a result of the attack on American medicine made by HEW Secretary Califano during the opening session of the AMA House of Delegates in San Francisco (see August *Journal*). The recommendation of the reference committee was that this resolution not be adopted and the AMA House of Delegates abided by the reference committee recommendation.

A third OSMA resolution calling for the AMA to urge the federal government to reimburse in full for those costs incurred under Medicare, Medicaid and other federal programs was referred through the Board of Trustees to the AMA Council on Medical Service for

study and a report, which will be given at the 1978 annual convention. The reference committee felt that the issues addressed by this resolution required further study and clarification. A report on the outcome of this resolution will be given after the June, 1978, annual meeting.

Another OSMA resolution, one calling for the correlation of studies in oncology and neoplasia, was also referred to the Board of Trustees for additional study. □

ORU Hospital Application Ruled Incomplete

An application for a proposed 770-bed hospital to be built on the campus of Oral Roberts University in Tulsa was ruled incomplete in mid-December by the Oklahoma Health Planning Commission. The application for a certificate of need was filed with the Commission in early December but declared incomplete because "the information is not sufficient enough for a review."

The certificate of need application for the proposed \$105 million City of Faith Medical Complex is the first step in a lengthy review process which the proposed institution must undergo. The final decision on the application will be made by health planning commissioners Dr Joan Leavitt, state commissioner of health; Dr Hayden Donahue, state commissioner of mental health; and Lloyd Rader, DISRS director. According to ORU officials, the City of Faith Medical Complex patient load will come from the followers of Oral Roberts found nationwide. ORU Vice Provost of Medical Affairs, Dr James Winslow, said that the facility will be a national referral center similar to the Mayo Clinic. According to Dr Winslow, the ORU hospital will not have facilities to treat short-term, acute conditions. He said the City of Faith application does not include requests for an obstetrical department, computerized tomography equipment, linear accelerators, a neonatal intensive care unit, kidney dialysis equipment, or a burn unit. Winslow said these facilities are already in operation at other Tulsa hospitals and that the City of Faith Medical Complex anticipates sharing these services. □



Rex E. Kenyon, MD

Distinguished Service Award

The House of Delegates of the Oklahoma State Medical Association hereby recognizes Rex E. Kenyon, MD, who has tirelessly and faithfully served his county, state and American medical associations. The OSMA House of Delegates also congratulates Dr Kenyon on his election to the position of chairman of the American Medical Political Action Committee and expresses its appreciation to Dr Kenyon for the able and dedicated manner in which he has served both medicine and the public. Because of his continuing sacrifices and his interest in medicine and democracy, all have prospered.

This award was presented to Dr Kenyon at the November 19 meeting of the OSMA Board of Trustees. □

Malpractice Suit Not Barred By Statute of Limitations

The limitations period in a medical malpractice cause of action began to run from the time the injury manifested itself in a physi-

cally objective manner and was ascertainable, a New Mexico appellate court ruled.

A patient underwent surgery in February, 1971, and allegedly the surgeon left a cottonoid in his body. It was discovered during later surgery in April, 1973. The patient filed a malpractice suit against the operating physician in January, 1976, and the physician moved for summary judgment on the ground that the suit was barred by the three-year statute of limitations. A trial court denied the motion, and the physician appealed.

Affirming the decision, the appellate court said that there was no cause of action for malpractice until there was a resulting injury. The court said that the limitation period began at the time the injury was ascertainable and manifested itself in a physically objective manner.

The discovery of the cottonoid during the second operation began the limitations period, the court said. The suit was filed within three years from discovery of the foreign object, and the trial court properly denied the motion for summary judgment, the appellate court said. □

The Oklahoma Industrial Recreation and Fitness Council

The Oklahoma Industrial Recreation and Fitness Council now operates statewide establishing its foundation for preventive health maintenance in Oklahoma's workforce. The Council's strategy is to evaluate, prescribe and monitor exercise and nutritional behavior. The three-phase program calls for 1) a mobile fitness laboratory to administer physiological testing *in situ*, 2) exercise and nutrition prescriptions, and 3) an annual post test. Members who receive these services are employers and employees of businesses, government agencies, higher education and private associations.

With his physician's approval, the individual employee takes a battery of physiological tests at a convenient location. The tests include: RISKO, resting EKG, resting heart rate and blood pressure, Schneider Cardiovascular Index, weight prediction (based on 11 body circumferences), body fat determination (skin-fold fat measure, body diameters, underwater weighing), arterial oxygen saturation, respiratory functions, strength test (grip strength and leg strength), flexibility, reaction time (simple finger, vertical jump), physiog-

raph (heart rate, blood pressure, carotid pulse, heart sounds) and treadmill test (Balke Procedure). Based on the outcome of the individual's tests, his work capacity and his physical liabilities, a personal regimen of exercise and diet is prescribed.

In the business context, the Council serves as a broker to provide fitness specialists to members who request them. After reviewing the test data with the physiologists, the fitness specialist organizes the most efficient recreation activities to accommodate the individual prescriptions. Available facilities on site or in the community are utilized. Where no facilities exist, alternatives are proposed. For example, a parcours (an exercise and jogging trail) can be designed for limited space and built inexpensively. Cooperative and competitive programs are also developed to promote fitness and maintain enthusiasm. Finally an annual post test is administered, and new regimens are prescribed.

The Council's goals, then, are to utilize the resources of its tripartite membership of business, government and higher education to: 1) implement personnel fitness programs, 2) provide a clearinghouse for the dissemination of the most reliable information pertinent to fitness, nutrition and related matters of health—published quarterly in *Life Style*, and 3) cultivate popular awareness of creative leisure.

Philosophically, the Council supports the Oklahoma Health Systems Agency's campaign for "wellness" and endorses aerobic exercise in a recreational context as the key. C. J. Roberts of Oklahoma State University serves as the Council's executive vice-president and maintains that Oklahomans' life styles must change for wellness to be realized. He contends, among other things, that the creative use of leisure time must replace the passive, sedentary, debilitating use of that time.

Since the OSMA's endorsement of the Council at the 1977 annual meeting, most of its time has been devoted to expanding the membership base, communicating its programs and soliciting the funds for the mobile laboratory. For membership information, a *Life Style* subscription or further details, contact: The Oklahoma Industrial Recreation and Fitness Council, 610 Adams St., OSU Campus, Stillwater, OK. 74074. Telephone: 405-624-7685. □

DEATHS

JAMES R. KAY, MD
1929-1977

James R. Kay, MD, 48-year-old Norman radiologist, died on December 6, 1977. Dr Kay was born in Adair, Oklahoma, and received his medical degree from the University of Oklahoma College of Medicine in 1959. Certified by the American Board of Radiology, Dr Kay was a member of the Greater Oklahoma City Radiologists Society. He had practiced in Fairview, Oklahoma, Coffeyville and Chanute, Kansas, before moving to Norman four years ago.

EDWIN A. MCGREW, MD
1898-1977

Norman physician, Edwin A. McGrew, MD, 79, died December 6, 1977. A native of Columbus Junction, Iowa, Dr McGrew graduated from the University of Iowa College of Medicine in 1924. His practice was established in Norman in 1961. He was a member of the Oklahoma chapter of the American Academy of Family Physicians.

In 1974, the Oklahoma State Medical Association presented Dr McGrew with a Life Membership in recognition of his service to humanity and the medical profession.

CLIFFORD M. BASSETT, MD
1904-1977

Clifford M. Bassett, MD, a pioneer Cushing, surgeon, died December 3, 1977. A native of Kansas City, Missouri, Dr Bassett was graduated from the University of Oklahoma College of Medicine in 1930, establishing his practice in Cushing in 1934.

A former President of the Payne County Medical Society, he was honored in 1974 as Cushing's most outstanding community leader. Dr Bassett was a Diplomate of the American Board of Abdominal Surgeons, a Fellow of the American Society of Abdominal Surgeons and a senior Fellow of the Southwestern Surgical Congress.

Dr Bassett had been presented a Life Membership in the Oklahoma State Medical Association. □

Anatomia Animata: Visceral Reflexes

ERNEST LACHMAN, MD

The following presentation, which does not claim to be based on personal research, is a summary of pertinent information in texts and reference works and the clinical experience of the author.

I. Coughing

Coughing is a violent expulsion of air by forceful contraction of the expiratory muscles and sudden opening of the glottis, preceded by deep inspiration and closure of the glottis. While coughing can be initiated by voluntary action, it is usually a reflex in response to irritation of the mucosa by foreign material or muco-purulent exudate in larynx, trachea, or bronchi.

Coughing is mediated on the sensory side by various afferent branches of the vagus from larynx, trachea and bronchi. On the motor side forced expiration is effectuated essentially by the antero-lateral muscles of the abdominal wall, aided by contraction of the pelvic diaphragm and by the interosseous portions of the lower internal intercostal muscles. Closing and opening of the glottis is controlled by the sphincteric and anti-sphincteric intrinsic muscles of the larynx (abductors and adductors of the larynx).

2. Sneezing

Sneezing is similar to coughing in that it also involves a violent expulsion of air by vigorous contractions of the expiratory muscles, but the opening of the pharynx into the mouth is closed by contraction of the anterior pillars of the tonsillar fossa and descent of the soft palate so that the air is expelled entirely through the nose. This reflex is brought about by mechanical or chemical irritation of the sensory nerve endings of nasal branches of the trigeminal nerve.

In a certain percentage of people, strong light, particularly sunlight, may also elicit sneezing, but the exact pathway of this reaction to light is unknown.

3. Hiccup (Singultus)

Hiccup is a repeated involuntary spasmodic and short-lasting contraction of the diaphragm accompanied by sudden closure of the glottis. The impact of the air against the closed glottis causes the characteristic sound. Hiccups may be the result of irritation of peripheral afferent nervous pathways or of the respiratory center in the nervous system. The peripheral afferent nerve endings may be stimulated by swallowing of irritating material, by acute or chronic lesions of the esophagus, stomach, or small intestine, such as gastric distention or obstruction of the small intestine. Some of these conditions may lead to pressure on the nerve-ending in the peritoneum, thus also causing hiccups. Singultus following abdominal operations or due to hemorrhage or edema in the medullary respiratory center may be so severe and lasting as to endanger life.

The sensation leading to hiccups is mediated by sensory branches of the vagus if the stimulus arises within the viscera or by afferent branches of the parietal peritoneum which include, in addition to nerves from the abdominal wall, also sensory fibers from the subdiaphragmatic portions of the phrenic nerve. The spasms of the diaphragm are mediated by motor fibers of the phrenic nerve. Closure of the glottis is brought about by the inferior laryngeal ramus of the recurrent laryngeal branch of the vagus. The spasms may involve one or both sides of the diaphragm.

4. Yawning

Yawning consists of a deep inspiratory effort through the wide-open mouth and is probably brought about by lowered oxygen tension of the blood as an involuntary expression of air hunger, eg in high altitude or after severe hemorrhages. It may be induced by suggestion as, for instance, by the sight of others yawning. In rare cases, it may result in bilateral dislocation of the jaw. As many of these reflexes, it can also be observed in various species of animals.

5. Swallowing (Deglutition)

Swallowing is a complex neuromuscular mechanism which only in its first stage is subject to volition. After the food is ground by the teeth and chewed with the help of saliva, it is formed into a bolus. By action of the tongue and particularly its styloglossus muscles the bolus is then directed upward and backward to the back of the mouth and forced through the fauces into the pharynx. This is the voluntary phase of the mechanism and the reflex stage starts. It consists of a well-coordinated propulsion of the bolus into the oral pharynx and the esophagus. In its passage through the pharynx the food has to be prevented from entering the wrong channels, ie the nasal cavity, the larynx and the trachea. The nasal part of the pharynx is shut off from the oral pharynx by raising of the soft palate, mainly effecuated through the action of the levator veli palatini on both sides. Entrance into the larynx and trachea is prevented by closure of the laryngeal vestibule through contraction of intrinsic muscles of the larynx and by the action of pharyngeal muscles, which raise the hyoid and larynx and make it approximate the epiglottis. The participation of the epiglottis itself by its folding over the larynx (like a lid or a cap) is often assumed, but doubted by scientific sources. The bolus of food passes downward directly over the epiglottis or is diverted laterally by the ary-epiglottic folds, bypassing the closed entrance into the larynx, as it flows into the piriform recesses of the pharynx. This passage is usually taken by fluids. Retrograde return to the oral cavity is prevented by the contraction of the palatoglossal and palatopharyngeal muscles. The bolus is propelled into the esophagus by the well-coordinated successive contraction of the superior, middle and inferior constrictor muscles of the pharynx. Finally, the lowest fibers of the inferior constrictors relax and the food enters the esophagus. In the upright position, the force of gravity helps the downward passage of food, but swallowing and propulsion of the bolus is also possible in the upside-down position of the body.

The sensory part of the swallowing reflex is mediated mainly by the glossopharyngeal nerve whose pharyngeal component is incorporated in the pharyngeal plexus. The motor

fibers to pharynx and larynx from the vagus and accessory nerves are likewise part of the pharyngeal plexus. The glossopharyngeal nerve via its branch to the stylopharyngeus and the trigeminal through its innervation of the tensor veli palatini also participate in the efferent portion of the reflex arc.

Dysphagia denotes difficulty in swallowing or inability to swallow. It is a fairly common and important clinical symptom and may be caused by lesions in the central nervous system or in the periphery.

6. Vomiting

Vomiting is the forceful ejection of gastric contents through the mouth and is often accompanied by nausea. This visceral reflex can be initiated in many parts of the body and is transmitted through sensory fibers to the vomiting center in the medulla. One of the more common causes is irritation of the mucous membrane of the stomach or duodenum by food or drugs. Irritation or distention of numerous viscera such as heart, uterus, small intestine, gallbladder and appendix and also of the parietal peritoneum can likewise initiate the reflex. Nauseating sights, tastes, odors and psychological upsets can also bring about vomiting. Stimulation of the vestibular apparatus as in motion-sickness may induce the reflex. A number of diseases of the central nervous system, such as meningitis, encephalitis and brain tumors, also may cause vomiting.

Vomiting is brought about by vigorous contraction of the abdominal wall and thoracic and pelvic diaphragms with simultaneous relaxation of the cardiac sphincter and the esophagus. This coordinated action leads to an increase in intragastric pressure, which results in reflux of the gastric contents through the relaxed esophagus and open mouth. As a protective action, the glottis tightly closes and the soft palate is elevated, thus preventing entrance of the vomitus into larynx or nasal pharynx. Previously assumed gastric retroperistalsis hardly ever occurs. Peripherally caused vomiting is initiated by stimulation or irritation of sensory nerve endings in the wall of the affected organ, such as the stomach or duodenum. Afferent nerve fibers from these organs go by way of vagus or sympathetic to the vomiting center in the medulla. The efferent neurons run in motor fibers of phrenic and intercostal abdominal

nerves to the skeletal muscles of the abdominal wall, including the diaphragm. The vagus by its motor innervation of the viscera also participates. Not quite clear is the cause of vomiting in early pregnancy which is ascribed either to hormonal or metabolic influences.

7. Belching (Eructation)

Belching is the forceful expulsion of air from the stomach which has been swallowed with the food. The air is visible on every gastric x-ray examination in the erect position. It is located in the fundus of the stomach, ie, at the highest point.

8. Defecation

As in many visceral reflexes, the mechanism of defecation is, in part, under voluntary control. Personal habits and emotional states influence time and frequency of the act. Normally the distal part of transverse and sigmoid colon store the fecal masses while the rectum is generally empty; but when due to overflow of feces the pressure in the rectum rises and its distention increases, a number of striated and smooth muscles contract and others relax to bring about the evacuation of the rectum through the anus, provided no inhibitory muscles, subject to voluntary control, are activated. The intentional act of defecation starts with the voluntary elevation of the intra-abdominal pressure by contraction of the thoracic and pelvic diaphragms, the closure of the glottis and contraction of the musculature of the abdominal wall. This is combined with peristaltic contraction of the circular musculature of the distal colon and rectum and retraction of the longitudinal musculature of the same portions of the intestines. As the latter process elevates the rectum and anus over the descending fecal column, mass movements of the contents of the descending and sigmoid colon simultaneously empty into the evacuating rectum. An important part of the act consists in relaxation of the sphincters of the rectum such as the pubo-rectal sling of the levator ani and the internal and external anal sphincters.

The afferent part of the reflex arc of defecation starts with the very sensitive nerve endings, particularly the stretch receptors in the wall of the rectum. Indeed, perception is

so acute that the sensory receptors can distinguish (as it were) between air and water. The stretch receptors are the terminations of nerve fibers which are derived from the middle and inferior rectal plexuses. The latter connect with the sacral cord via the essentially parasympathetic pelvic splanchnic nerves. Sensory inferior rectal nerves, that supply the lowest part of the rectum, are branches of the pudental nerves (S 2, 3 and 4)

On the effector side of the reflex arc, we have the voluntary innervation of peripheral motor nerves that activate the muscles of the abdominal wall, the thoracic and pelvic diaphragms and the sphincters of the glottis. The efferent involuntary impulses are conducted by preganglionic parasympathetic fibers that synapse with ganglion cells in the wall of the intestine. The postganglionic fibers of these ganglion cells innervate the smooth musculature of the gut. The external anal sphincter, which voluntarily relaxes in defecation, is innervated by the inferior rectal branch of the internal pudental. This muscle is also the only guardian, that by its voluntary contraction prevents unwanted evacuation of the rectum. However, the external and sphincter is not strong enough to maintain its contraction for any length of time against increasing rectal pressure. The external anal sphincter, whose presence prevents incontinence, is located in the lower two centimeters of the rectum. In surgical removal of the rectum this lowest portion is preserved whenever possible.

9. Urination (Micturition)

The act of urination is rather complex and its anatomy and physiology is still under dispute. It is most easily understood in the infant where it is a pure reflex, not subject to conscious voluntary control. Here it takes place whenever the bladder has become sufficiently distended. As the organ fills with urine from the ureters, its wall is stretched by relaxation of its muscle fibers. This reflex triggers contraction of the bladder musculature and particularly the part that is called the detrusor muscle. It also reflexly relaxes the so-called internal sphincter and the striated external sphincter. As the urine enters the posterior part of the urethra the voiding reflex is potentiated. Paralleling the development of the brain during the second or

Editorial

third year of life, the child acquires the ability to voluntarily control the emptying reflex. A feeling of fullness is perceived when 300 to 500 cc is accumulated. If voluntary emptying is inopportune at that moment, voiding can be deferred by contraction of the external sphincter and inhibition of further bladder contraction. But if the amount of urine in the bladder reaches 800 cc or more, the desire to urinate becomes uncontrollable. Folklore is aware of the fact that young boys can urinate with far more force than adults, and often compete with each other as to the distance that the urine stream will traverse. This ability is due to the interesting anatomical fact that in the young the bladder is an abdominal organ that reaches far above the symphysis. The bladder's descent into the pelvis with maturing age and the pubertal development of the prostate around the urethra account for the decrease in force of the urinary stream.

We have stated before that emptying of fair amounts of urine can be suppressed by volition, on the other hand voiding can also be initiated voluntarily even if the bladder contains only small amounts of urine. This is effectuated by straining through contraction of diaphragm and abdominal musculature and voluntary relaxation of the external sphincter, which is part of the urogenital diaphragm. Once urine has entered the proximal part of the urethra, reflux action will bring about contraction of the detrusor and relaxation of the internal sphincter. The external sphincter can by its contraction voluntarily interrupt the flow of urine during voiding. Involuntary micturition may occur in emotional upsets where centrally originating impulses will increase the tonus and state of contraction of the bladder. In the female, weakening of the pelvic floor, as in cases where the pelvic and urogenital diaphragms have been damaged by complicated deliveries, may result in incontinence, eg in coughing or laughing that leads to an increase in abdominal pressure.

Afferent pathways of the reflex arc, mediating micturition, starts in proprioceptive stretch and other sensory receptors which are the endorgans of sensory nerve fibers transmitting the sensation of fullness and, in cases of overfilling, of pain and urgency. Most of

these afferent fibers course with the parasympathetic pelvic splanchnic nerves. Some pain fibers travel with the sympathetic nerves through the inferior hypogastric plexus. The efferent or effector part of the reflex is completely under parasympathetic control. The nerve impulses leading to contraction of the bladder and relaxation of the so-called internal sphincter are conducted by preganglionic fibers that are components of the pelvic splanchnic nerves from sacral nerves 2, 3 and 4. The fibers synapse with ganglion cells in the bladder wall which then activate the musculature of the bladder by their postganglionic fibers. Since the nerves on their way to the bladder pass on both sides of the rectum, they may be injured in resection of the rectum, as for instance in cancer operations, thus leading to difficulties in urination. The external voluntary sphincter is controlled by the pudental nerve.

10. Erection

Erection of the penis from its normal flaccid state takes place in response to appropriate stimuli. These stimuli lead to engorgement of the corpora cavernosa penis and the corpus spongiosum by relaxation of the muscular wall and dilatation of the deep and dorsal penile arteries. These arteries empty via coiled or helicine arterioles into an endothelial-lined network of cavernous spaces. Expansion of erectile tissue leads to compression of the veins located between the distended corpora cavernosa and the inelastic tunica albuginea, resulting in interference with the venous return. Contraction of the bulbocavernosus and ischiocavernosus muscles has the same effect on the veins. Thus the penis increases in length and transverse diameter and assumes the erect position. Once orgasm with ejaculation has been reached or the erotic stimuli leading to erection have been interfered with, the arteries again become constricted, the arterioles coiled, and the blood is permitted to return by way of the expanding veins. The organ then returns to its former flaccid state.

The afferent impulses producing erection travel in part by way of sensory receptors and fibers that are derived from the pudental nerve. The impulses may be initiated by mechanical stimulation of the skin of the penis, particularly the glans, but tactile stimulation of the penis is not the only

means of causing erection. Sensory stimulation of other parts of the body and visual, auditory, and olfactory excitation may also bring about erection. Finally, erotic thoughts originating in the brain may have the same effect. It should be recalled that olfactory perception as an act of sexual stimulation is of far greater importance in the animal kingdom, but we are also aware that in man artificial scents, as in perfumes, are designed for the same purpose.

The efferent nerve supply that leads to penile erection travels by way of the parasympathetic fibers contained in the pelvic splanchnic nerves from sacral nerves 2, 3 and 4. The older literature speaks of these nerves as *nervi erigentes*. Constriction of the arteries of the penis leading to cessation of erection and flaccidity of the organ is effectuated by sympathetic fibers derived from the 12th thoracic and the upper lumbar segments of the cord.

Erection in the female is essentially the same in mechanism and nerve supply. The erectile tissue of the female is contained in the clitoris and the vestibular bulbs under cover of the labia minora and the bulbocavernosus muscles. On sexual stimulation there is erection of the clitoris and engorgement of the erectile tissue in the vestibule. Continuation of the stimulus causes the secretion of a viscous fluid from the greater and lesser vestibular glands. This facilitates the introduction of the erect penis. The latter part of the reflex arc is under parasympathetic control.

11. Ejaculation

Ejaculation is the expulsion of seminal fluid from the external opening of the urethra in the presence of proper stimuli. Sperm is propelled by rhythmic contractions of the ducts of the epididymis, the deferent ducts and the seminal vesicles and contraction of the musculature of the prostate, followed by similar spasmodic contractions of the bulbocavernosus and ischiocavernosus muscles. Simultaneous stimulation of glands

associated with the vas deferens, *ie* the seminal vesicles, the prostate and the bulbourethral glands, results in the production of an alkaline secretion in which the spermatozoa are suspended and which constitutes the seminal fluid or semen. The latter, amounting on the average to about four cubic centimeters, contains a quarter of a billion spermatozoa or less, allowing for downward variations depending on age and frequency of intercourse. During ejaculation the so-called internal sphincter of the bladder closes, thus preventing reflux of the semen into the bladder. Ejaculation is preceded or accompanied by a mass discharge of nervous impulses resulting in an acme of emotional sensations and motor reactions that represent orgasm. The broad spectrum of reactions is exemplified by wide changes in pulse rate, blood pressure, and respiration.

Parenthetically it should be remarked that, although rare, emission of semen can take place through a flaccid penis.

As to the nervous elements responsible for the ejaculation reflex, the afferent pathways are mostly fibers that reach the spinal cord via the pudental nerves. However, impulses leading to ejaculation may arise elsewhere in the body as discussed under "Erection" with complete absence of tactile stimuli of the penis. The reflex is under control of centers of the brain which can prevent or retard ejaculation. On the effector side, the sympathetic and the parasympathetic systems participate. The first part of the reflex, *ie* the movement of the semen through the deferent ducts, seminal vesicles, and prostatic urethra is under sympathetic control, probably by preganglionic fibers from cord segments L1 and 2 which synapse in the corresponding lumbar sympathetic ganglia, while the final expulsion of the seminal fluid by the perineal muscles is controlled by the parasympathetic.

Enucleation of the prostate destroys the sphincteric arrangement of the bladder neck and makes the person sterile through reflux of the semen into the bladder, but this person is not impotent and is still able to perform the sex act. □

Along with the start of a new year comes the beginning of this country's legislative process that seems to impact so greatly upon our profession. Both the Oklahoma Legislature and the US Congress began new sessions in January, and the legislative interest in health matters, kindled in the mid-60's, continues with even greater fervor. Most of us are aware of the major debates — National Health Insurance, National Health Planning, and Cost Containment. In our own state, battle lines are forming over re-organization of the Mental Health Department, worker's compensation, alcohol treatment and professional advertising.



Most of us (far too many) are sideline observers in these political battles, and some of us look with disdain upon the entire political process. Too few of us are really involved . . . using our special knowledge and skills to jibe, persuade, influence and force the outcome of the legislative process. Our scientific training and problem solving techniques don't appear to fit well in the legislative arena. BUT THEY DO!!

Both the chairman of our Council on Governmental Activities, Dr Perry Lambird, and the Chairman of our State Legislative Committee, Dr Bill Hughes, can testify to the value of "nitty gritty" politics. The continuing relationship with lawmakers is far more valuable than the "big stick" approach. Political clout is built up over many years; years of low talk and slow walk reap greater rewards than swift moves and loud shouts. For every big battle there are hundreds upon hundreds of little ones. The tragedy is that too few of us even know about them.

All of this has been said before and most assuredly will be said again. One response will be, "I don't have the time;" another will be, "How do you do it?" For the "how do you do it's," here is a formula for success that is guaranteed.

Find out who your legislators are — your representatives and senators. Meet with them in their offices or the state capitol if possible. Get to know them, hopefully on a personal basis. Talk with them at other than crisis times. Talk about issues other than medicine. Talk about little problems as well as big ones. In other words, be interested in what your government is doing. Make yourself available for consultation — little decisions are often made quickly, and a hurried telephone call is the only opportunity to influence the outcome.

The making of laws begins with the election, and good candidates need good helpers to get elected. Doctors generally don't like campaigning, but in the final analysis, it is here that the legislative process begins. You can be effective in this process first by working for candidates of your choice and second, by becoming a member (preferably sustaining) of the Oklahoma Medical Political Action Committee. OMPAC provides financial assistance to worthy political candidates, and with the tremendous costs of conducting a successful political campaign, only those candidates with both financial assistance and a supportive work force behind them can hope to succeed. Ultimately we all suffer if we fail to offer this support.

To many the word politics conjures up visions of smoke-filled rooms, Tea Pot Dome and Watergate. The thought of calling upon one's senator or representative seems unpleasant at best. But it doesn't have to be that way.

We are all responsible for the type of men and women we put in office as we are responsible for the laws these lawmakers pass. As doctors we have a unique opportunity to influence this process for the good of ourselves, our patients, our families, our state and our country.

I urge each of you to do just that.

C. S. Lewis, Jr., M.D.

Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head

We wish to report our experience with this technique with three patients at the University of Oklahoma Health Sciences Center.

TECHNIQUE

DAN C. GALLOWAY, MD
WILLIAM G. PHILLIPS, MD

Neuroradiologists are applying new techniques for the treatment of certain vascular lesions of the head which are markedly facilitating surgical resection of these difficult lesions.

Percutaneous transfemoral selective embolization is a valuable aid prior to surgical excision of certain vascular lesions in the head. This technique allows selective obliteration of the arterial supply of the lesion, and at the time of surgery, dramatic reduction of blood loss has been noted.

Hilal¹ *et al* reported successful pre-operative treatment of glomus jugulare tumors, dural arteriovenous malformations, and meningiomas. Djindjian² has reported similar results. Kricheff³, Boulos⁴, Djindjian⁵, and Wolpert⁶ report embolization of intracerebral arteriovenous malformations in selected patients as a therapeutic measure prior to surgical resection or as a definitive treatment in non-resectable lesions.

Percutaneous transfemoral cerebral angiography under local anesthesia was initially performed with selective internal and external carotid examinations. Following identification of the external carotid blood supply of the lesion, a seven french headhunter one catheter* with a single end/hole was placed in the external carotid artery with the distal tip three to six centimeters distal to the common carotid bifurcation. A repeat injection with serial angiography was performed to confirm catheter placement. Multiple emboli consisting of 0.2 cm x 0.2 cm x 0.5 cm blocks of gelfoam were suspended in saline and flushed through the catheter. The embolization procedure was repeated until obliteration of the blood supply was achieved and documented angiographically.

Case I

A 65-year-old white male presented to his local physician with complaints of occipital headache. Evaluation revealed a large left occipital arteriovenous malformation and the

*Cook Catheter Company, Bloomington, Indiana

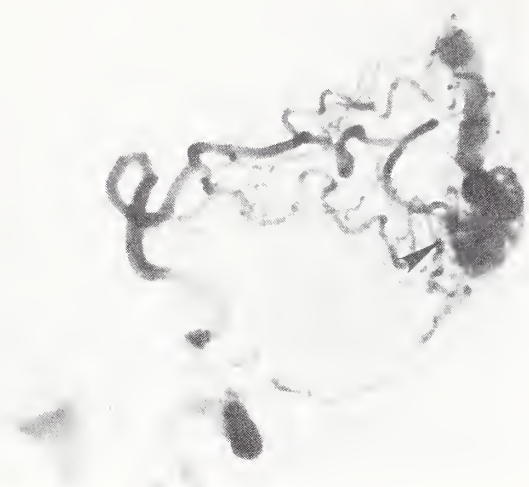


Fig 1—Case I
Left vertebral injection revealing a large occipital arteriovenous malformation predominately supplied by the left posterior cerebral artery.

patient was referred to Veterans Administration Hospital for treatment.

Physical findings were not remarkable.

The patient underwent percutaneous transfemoral cerebral angiography with selective bilateral internal and external carotid artery examinations as well as vertebral angiography.

A large arteriovenous malformation was noted in the left occipital region with its predominant supply being from the left posterior cerebral artery. (Fig 1) Selective left external carotid angiography revealed the left occipital artery, the left middle meningeal artery, and the left superficial temporal artery contributing to the blood supply of the arteriovenous malformation. (Fig 2)

Following consultation with the attending neurosurgeon, transcatheter embolization was performed as described above and successful obliteration of the dural blood supply was achieved. (Fig 3)

No neurologic deficits were noted at the termination of the procedure.

The following day a craniotomy was performed and the arteriovenous malformation was resected. The operating neurosurgeon felt the resection was markedly facilitated by the embolization procedure.

Case II

A 78-year-old male was referred to the

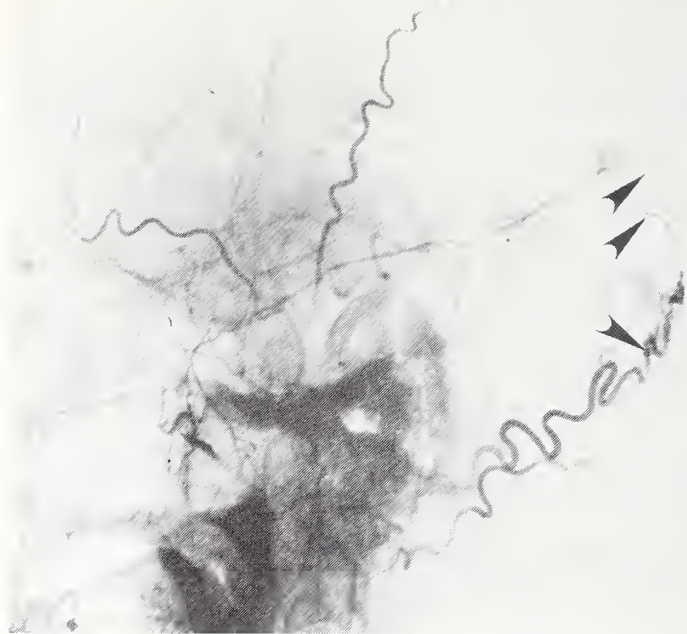


Fig 2—Case I
Left external carotid injection reveals the occipital, the middle meningeal, and the superficial temporal arteries to supply the arteriovenous malformation.

Oklahoma University Health Sciences Center for evaluation of a major motor seizure. Physical findings were not remarkable. The skull series revealed a one centimeter well-marginated lytic lesion in the right posterior frontal region. A computerized tomography scan noted a high density lesion in the right frontal region characteristic of meningioma.

Percutaneous transfemoral cerebral angiography was performed. Findings were

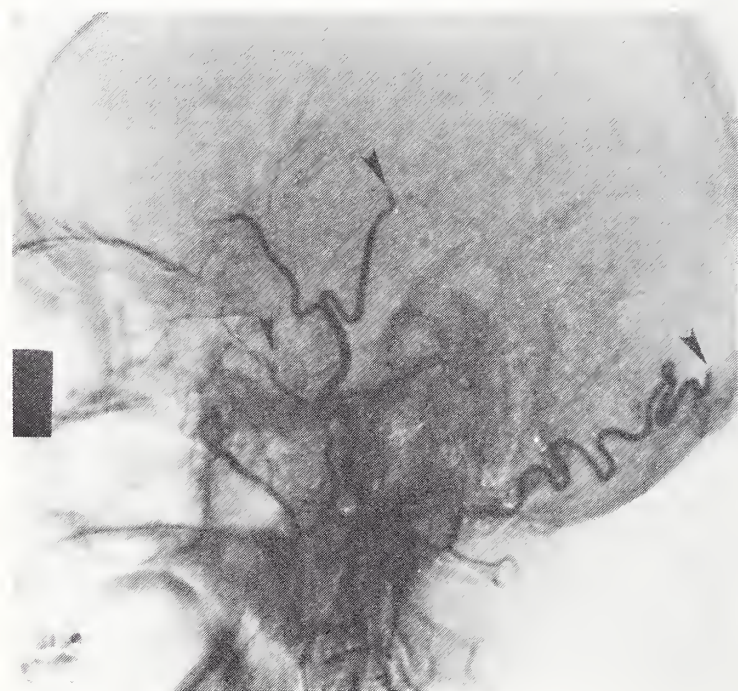


Fig 3—Case I
Left external carotid injection post-embolization notes occlusion of the external blood supply to the arteriovenous malformation.



Fig 4—Case II

Right external carotid injection exhibits a marked blood supply to the meningioma via the middle meningeal, the superficial temporal, and the posterior auricular arteries.

those typical of a right frontal meningioma with an abundant right external carotid blood supply. (Fig 4)

Following consultation with the attending neurosurgeon, embolization as described was performed and occlusion of the external carotid blood supply was achieved. (Fig 5)

No neurologic deficits were noted at the termination of the procedure.

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Fig 5—Case II

Right external carotid injection post-embolization demonstrates occlusion of the dural blood supply.

On the fifth post-embolization day a right craniotomy was performed and a large frontal meningioma was removed. The operating neurosurgeon felt the blood loss was markedly reduced due to the previous embolization treatment.

Histologic examination revealed a fibrous meningioma. On various sections, gelfoam emboli were noted in small arterioles and an associated foreign body reaction in and around the arterioles was present.

Case III

A 17-year-old male presented to his otolaryngologist with a history of nasal congestion and frequent episodes of epistaxis since childhood. Physical examination revealed a large mass in the nasopharynx. The skull series showed a large nasopharyngeal mass bowing the posterior wall of the right maxillary sinus anteriorly and obliterating the sphenoid sinus.

Cerebral angiography demonstrated a large vascular mass typical of a juvenile angiofibroma in the nasopharynx extending into the sphenoid sinus. The predominate blood supply was via the right maxillary artery. (Fig 6)

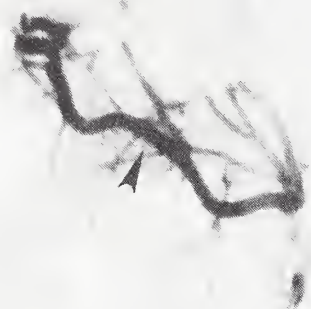


Fig 6A—Case III

Right external carotid injection reveals a markedly enlarged maxillary artery.

Transcatheter embolization was performed with almost total obliteration of the vascular supply to the neoplasm. (Fig 7)

The following day the angiofibroma was resected. The operating surgeons were impressed at the ease with which this extremely vascular lesion was removed. Hemostasis was markedly facilitated by the prior embolization.

DISCUSSION

Transcatheter embolization of the extracranial blood supply of certain vascular lesions of the head is a valuable and safe adjunct to surgical excision. In the opinion of the operating surgeons, significant reduction of blood loss was achieved in each of the above cases. Our limited experience confirms that of others.

Gelfoam appears to be the preferable embolic material because of its availability and reasonable cost. Also, gelfoam is readily com-



Fig 6B—Case III

Right external carotid injection in the late venous phase exhibits a marked tumor stain in the nasopharynx with extension into the sphenoid sinus.

pressible enabling it to be injected easily through relatively small catheters. This material produces relatively permanent occlusion of the desired vessel and is only slowly altered by the patient's fibrinolytic mechanism⁷. Unmodified autologous clot or Amicar modified autologous clot produces short-term occlusion of the vessel, lasting only twenty-four hours in experimental animals.^{7, 8}

Certain principles should be observed when this technique is used:

1. A team approach should be employed, with the neurologist, the neurosurgeon, and the neuroradiologist all playing active roles in the care of the patient.

2. Superselective cerebral angiography is required for proper identification of the vascular supply of the lesion.

3. Prior to embolization, proper placement of the catheter in the external carotid artery should be documented angiographically.

4. As embolization proceeds, repeated con-



Fig 7—Case III

Right external carotid injection post-embolization notes only a small residual tumor stain remaining in the nasopharynx.

trast injections with serialography are required to document the site of the emboli. As obliteration of the external carotid blood supply occurs, fewer emboli should be injected because the greatest danger of internal carotid embolization occurs as the external carotid circulation is obliterated and blood flow slows. Once small test doses of

contrast material reveal stasis of flow or backflow into the internal carotid artery, embolization should cease.

5. The procedure should be terminated if a neurologic deficit occurs.

In conclusion, it would seem, in our experience and that of others, that transcatheter embolization appears to be a safe and valuable adjunct to surgical excision of certain vascular lesions in the head. Cerebrovascular accidents and ischemic facial skin lesions are possible, but quite rare.

SUMMARY

Percutaneous transfemoral embolization of the external carotid artery is a useful adjunct to surgical excision of certain vascular lesions of the head. Carefully performed and with adherence to certain principles, the technique is safe and readily tolerated by the patient. □

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Development of a Scoliosis Screening Program in Oklahoma Schools

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Due to the development of a screening program for scoliosis, an increased number of parents and children will be seeking medical evaluation. This article is intended to alert the medical profession of this program and provide newer information about scoliosis.

For many years, programs have been in existence in Oklahoma and other states to screen school age children for health problems such as visual or hearing impairment. In recent years, programs have been established to screen for scoliosis and other spinal deformities. Such a program is currently being developed in Oklahoma.

Scoliosis is a lateral curvature of the spine of greater than 10 degrees. Kyphosis (round back) is an angulation of the spine with a convexity posterior in the sagittal plane and lordosis (sway-back) is angulation with convexity anterior in the sagittal plane. These conditions can exist as separate entities or in combination. Any lateral curvature of the spine is abnormal. Frequently, it needs nothing other than observation, but will require treatment if it becomes worse.

While there are many causes of scoliosis, most cases (about 80%) are idiopathic. Most commonly the patient presenting with idiopathic scoliosis is an adolescent female. Congenital anomalies of the spine and neuromuscular disorders are the next most frequent causes.

While the exact mode of inheritance of idiopathic scoliosis has not been proven, it is known that it tends to occur in families. All siblings of patients with scoliosis should be examined to detect even mild curvatures.²

Scoliosis is a more common disorder than we previously appreciated. School screening programs in Delaware, Minnesota, and California have shown that 8 to 13 percent of school-age children will have a detectable degree of scoliosis.^{1,3,4} One to two percent of these children will require bracing or surgery; the remainder can be observed.⁵ The female-male ratio is 1.2:1.¹ One explanation given to account for the fact that more females eventually seek treatment is simply that they progress to a greater extent than males, ending up with a more severe curve and more pronounced physical abnormalities. In idiopathic scoliosis, the age at risk is mainly ages 9 to 14, (grades 5-9). Children in this age group are quite modest. Even parents knowledgeable with regard to the nature of scoliosis have often failed to detect early abnormal curves in their children's spines.

Detected early, scoliosis can be treated by bracing, sometimes avoiding surgery. When a screening program is initiated, large numbers of cases are detected in the first few years. Many of these early cases will require

surgery. With an on-going program, the cases are detected earlier, allowing more conservative management. Untreated, scoliosis can lead to crippling deformity and pulmonary compromise.⁶

School screening for scoliosis can be accomplished easily by trained personnel either during routine school examinations for other health problems, or as a separate procedure. When the spine bends laterally in scoliosis, it also rotates causing a prominence or "rib hump" easily detectable when the child bends forward. This forms the basis for the screening method.

Children should be wearing only gym shorts or underwear when examined. Girls may wear bras. Appropriate personnel such as physical education instructors, who have been trained as screeners, can examine the children. The examiner inspects the back of each child carefully with the child in a standing position, then asks the child to bend forward and reach toward the toes to inspect for a rib hump. Other signs, such as tilt of the shoulders, non-symmetrical contour of the flank or hips, a definite visible lateral curvature of the spine, or a lateral shift of the entire trunk are also noted.

Every child with suspicious findings is seen by a secondary screener, usually a trained physical therapist. If this person confirms the findings, a letter is sent to the parents suggesting referral to the family physician or

pediatrician. It is hoped that if the physician is the least suspicious, he will order a standing x-ray. It is important that the x-ray be made with the patient in the upright, weight-bearing position because many mild curvatures will disappear with the patient supine. The findings in these cases may be very subtle and detected only by someone who is accustomed to seeing scoliosis as shown by the following case reports.

CASE 1

V.B. was a 10-year, 5-month-old female first seen for evaluation of scoliosis in 1977. She had been followed for well-compensated mitral insufficiency since age two. There was no history of any spinal abnormalities in the family and neither the patient nor the family had noted any deformity of the spine. She was referred to the Orthopaedic Clinic because serial chest x-rays showed a progressive scoliosis. Examination revealed a back which appeared quite symmetrical. (Fig 1) There was no undue prominence of the shoulders and no visible scoliosis. By palpation, the spinous processes were deviated to the right in the thoracic area. On bending, the patient had a right rib hump or prominence of the thoracic wall. (Fig 2) Leg lengths were equal and neurological findings were entirely normal. An x-ray in October, 1976, (Fig 3), revealed a 20 degree thoracic curve convex to the right with a 10 degree



FIG 1. Scoliosis of 20 degrees viewed from posterior.

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FIG 2. Presence of right rib hump with forward bending

lumbar curve to the left. Lateral views revealed a normal amount of kyphos and AP films with lateral bending demonstrated the scoliosis to be a supple or correctible curve. The patient was followed with sequential x-rays and was noted in January, 1977, to have progressed to a 25 degree thoracic and a 20 degree lumbar curve. (Fig 4) The patient was then placed in a body jacket extending from the axillae to the iliac crests correcting her curvature to 12 degrees and 3 degrees respectively. (Fig 5) She is currently being followed at three-month intervals.

Comment: This case demonstrates that without x-ray confirmation, one might indeed consider this child as not having any curvature. Her only pertinent physical finding was the presence of a rib hump which again illustrated this as being a good diagnostic sign. It should also be noted that approximately 12 percent of children with congenital heart disease will have a scoliosis. This plus the next case point out the necessity of obtaining films to verify the presence of a scoliosis.

CASE 2

L.W. was a 13-year, 6-month-old female who was referred after having been seen in the school screening program. She was entirely asymptomatic and unaware of any deformities. History was pertinent in that the mother had a scoliosis which had been detected on a pre-employment chest x-ray as an adult. She too, was asymptomatic. On examination, the only abnormal physical finding on this child was deviation of the spinous processes laterally in the lumbar area. She

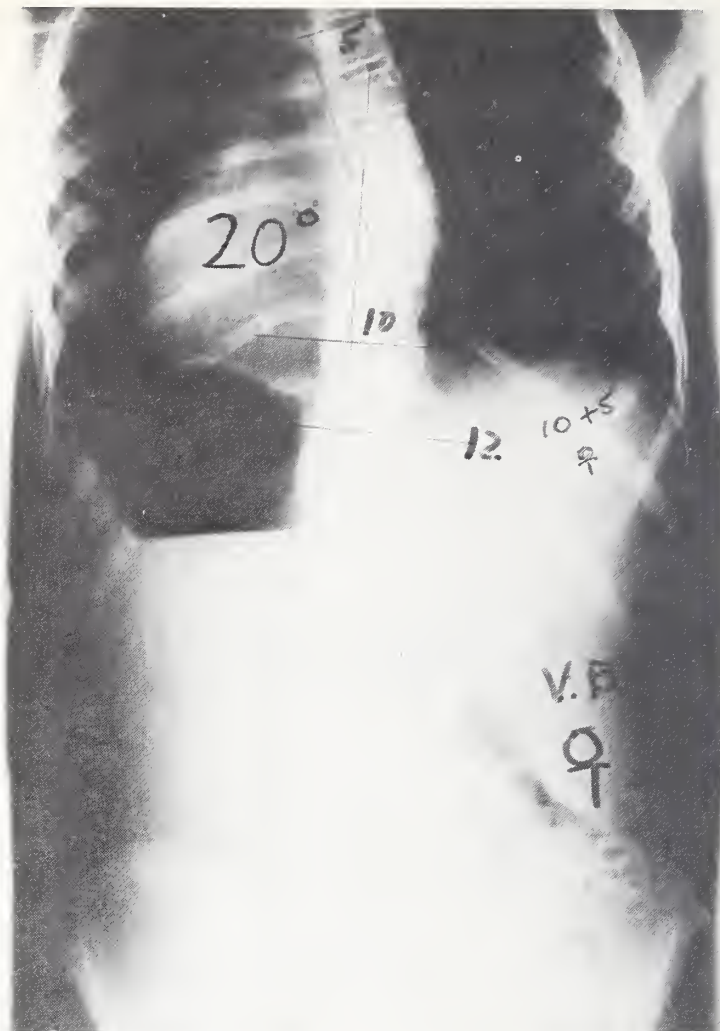


FIG 3. X-RAY — October 1976

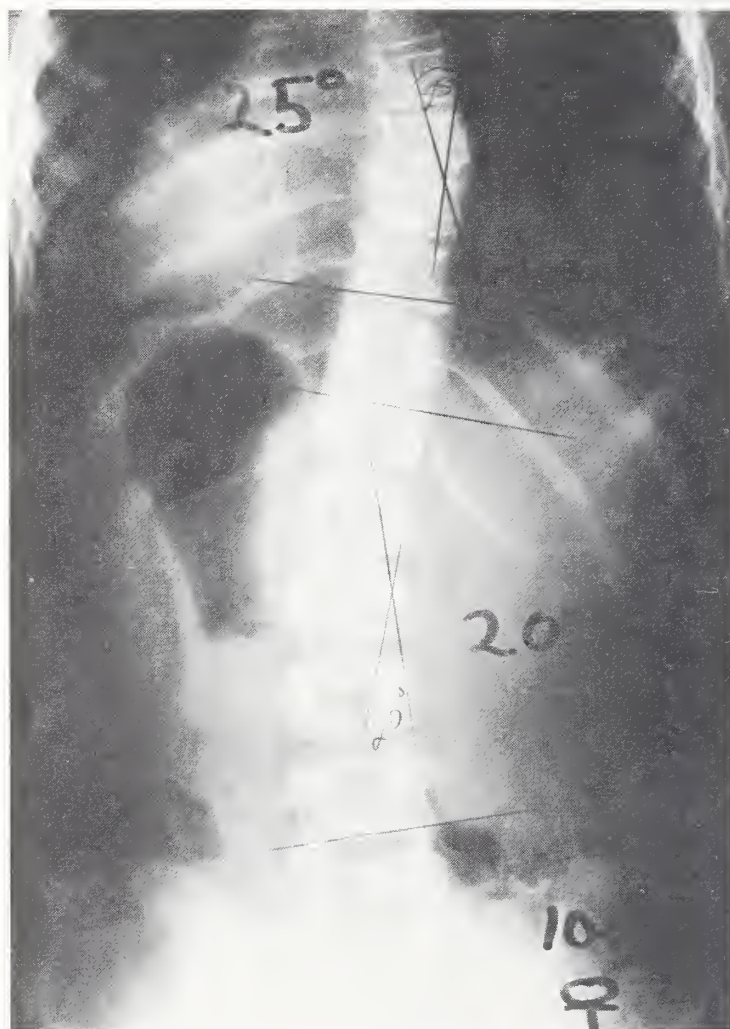


FIG 4. X-ray showing progression of scoliosis taken in January, 1977

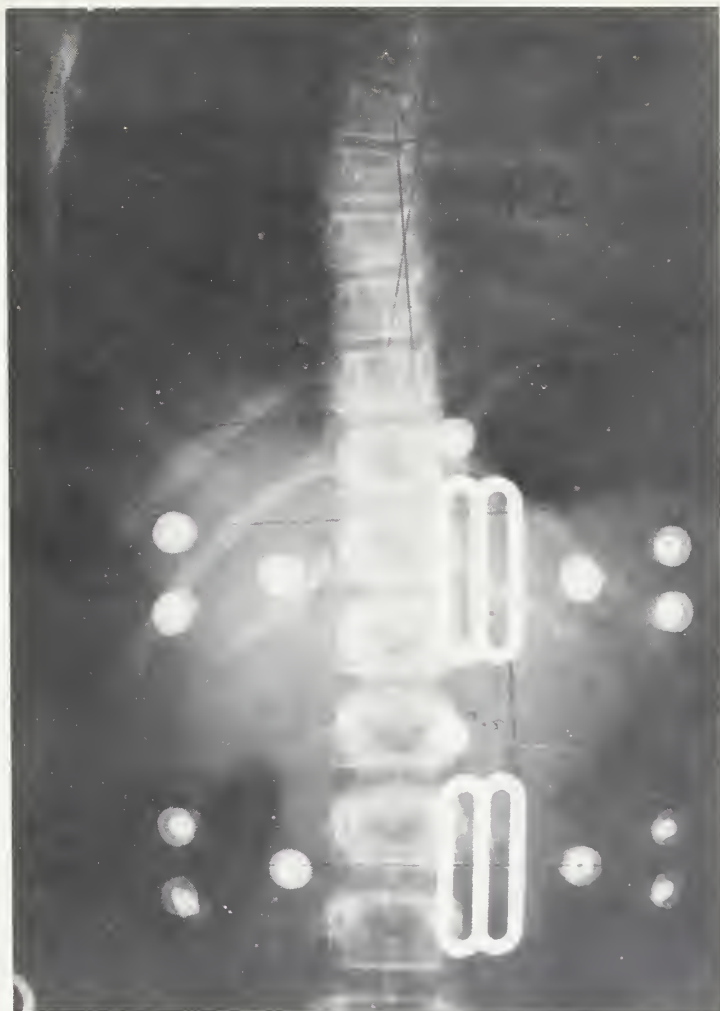


FIG 5. X-ray of curves corrected in brace

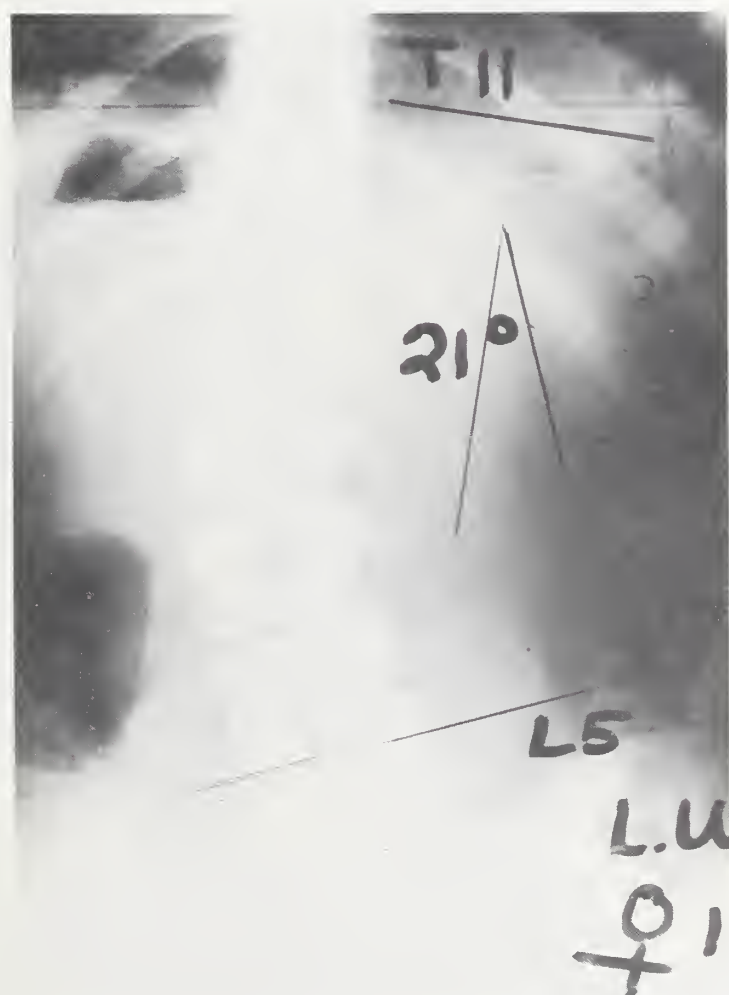


FIG 6. 21 degree lumbar scoliosis in a patient with minimal visible findings

had no visible scoliosis and on bending, there was no undue prominence. A standing x-ray, however, revealed a 21 degree lumbar curve. (Fig 6) This patient had been seen previously and had had an appendectomy. X-rays of the lumbar area at that time revealed no scoliosis. (Fig 7) Due to the known progression of 20 degrees over a two-year period, this patient was treated with an underarm brace.

Since 1974, the Oklahoma Society for Crippled Children, "The Easter Seal Agency," has been developing a statewide screening program for scoliosis. The objectives of the program are oriented for both education and service.

Large numbers of physical education instructors are trained in the detection of scoliosis. This is done by the means of training films, slides, and demonstration of patient examination in an hour-long session. The trainees are made aware of the importance of early detection. This helps to foster community awareness and public support. The society has also trained physical therapists to serve as secondary screeners. Through letters and pamphlets, physicians in the community have been alerted to the possibility of referral of children seen in school screening programs. Information is also available to refresh their knowledge on scoliosis. The service-oriented aspect of the program includes two parts. The first is providing the service of school screening with its potential for early detection and prevention of a crippling deformity. The second service is providing financial assistance for the payment of x-rays, examinations, and braces in eligible cases, where there is specific need.

From June, 1974, to April 15, 1977, screening services have been provided 47,494 students with parental permission in 20 separate school systems in Oklahoma. In the 1976-1977 school year alone, screening services were provided to 26,727 students in 14 separate school systems. The Society, with the advice and help of its consultant from the professional advisory committee, has trained the physical therapists and physical education instructors to carry out the screening. The parents of children who are screened through the secondary screener are notified by mail of the need for seeking medical consultation.

In 1977, 4,342 children were identified by the initial screeners as having some of the characteristics of scoliosis. Of these students,

4,262 were re-examined by the secondary screener who felt that 1,288 children should be referred for physician evaluation. In an attempt to obtain follow-up information, the Oklahoma Society for Crippled Children has mailed out 638 post cards to parents of children who have received medical referral slips. To date, the following results have been obtained:

210 Postal cards returned
114 Confirmations of the presence of scoliosis
85 Patients in whom no scoliosis was found by the physician
5 Patients were found to have skeletal problems other than scoliosis.

In addition to the 114 confirmations reported by postal cards, an additional 30 cases of scoliosis have been confirmed by the parents or the physician who have notified the Crippled Children's Society. Undoubtedly, other confirmations have been made of which the Society is not yet aware.

The development of a full school screening program in Oklahoma is still in the early stages. Several areas of improvement in the further development of the program can be brought about with physician cooperation. The problem of identifying children with scoliosis and referring them to doctors who can properly evaluate and treat them is not new. The Society for Crippled Children has endeavored to refer these children in the traditional manner through traditional channels involving family physicians and pediatricians. The society realizes however, that any major increase in the number of patients involved might over-burden already busy doctors and make conventional channels of referral less than adequately effective.

As the screening program expands, more and more children will be referred for evaluation and for treatment if needed. If the incidence of minimal scoliosis among Oklahoma's school children is 8 to 10 percent, as found in Minnesota and California, then as many as 1,200 children in Oklahoma City alone will be detected in the initial screening program and will require further evaluation. If our physical education instructors and physical therapists are well-trained and alert, they should identify all of these children. They must also have an index of suspicion that is

high enough, to include a small number of children who will prove to be "false positives" which would mean that in Oklahoma City alone, there would be more than 1,200 children who would need physician referral.

For this reason, it would be helpful to parents, family physicians, and pediatricians, to be able to refer these children directly to a physician who is particularly interested in caring for scoliosis. It is hoped that a referral list can be developed through the Oklahoma State Medical Society and the Oklahoma State Orthopaedic Association.

It would also be extremely helpful in dealing with the general problems of scoliosis if a registry could be developed to facilitate obtaining accurate followup information on the patients identified in the screening program. Useful data could include such information as age, sex, number of siblings screened, type, location of curve, and degree of curvature. In addition, it would be helpful to know the number of patients requiring bracing and surgery. From such a pool of information, more accurate knowledge could be obtained regarding both the incidence of scoliosis and eventually the effectiveness of treatment.

The value of school screening for scoliosis has been well-demonstrated in other states. In Oklahoma, with continued support from the medical community, screening programs initiated by the Oklahoma Society for Crippled Children can develop into an exemplary program of public service in the area of preventive medicine.

While many individuals were involved in the initiation of the current school screening program in Oklahoma, it is largely the work of Mr. Wallace Bonifield of the Oklahoma Society for Crippled Children. Without the strong support of the Society and its Board of Directors, this program could not have been started or developed.

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Oklahoma Children's Memorial Hospital, P.O. Box 26307, Oklahoma City, Oklahoma 73126

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Just who are they? They're the AMA's permanent representatives to the Congress of the United States from the AMA's Washington office.

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News From The Oklahoma State Department of Health

New Venereal Disease Regulations Adopted

The Oklahoma State Board of Health on December 10, 1977, adopted new rules and regulations governing the diagnosis and management of venereal diseases. The new rules are in keeping with the latest concepts of prevention and control of venereal diseases, especially syphilis and gonorrhea.

New rules and regulations concerning the management of gonorrhea were very important for several reasons. First, the recent introduction of penicillinase producing *Neisseria gonorrhea* (PPNG) into the United States has caused greater concern for post treatment follow-up of patients treated for gonorrhea. The new regulations require a test of cure 3-7 days following treatment. Tests of cure that are positive can be readily

tested for PPNG. Secondly, asymptomatic carriers of gonorrhea, both male and female are now known to exist in a much greater proportion of the cases than suspected only a few years previous. The new regulations require clinical examinations and laboratory procedures that will detect asymptomatic carriers to the highest degree possible. Also, the increased concern that *Neisseria gonorrhea* is a leading cause of pelvic inflammatory disease and that most male sexual partners to these women are frequently asymptomatic, emphasize the importance of these new rules in preventing this kind of morbidity. Third, the prevention of gonorrhea through the examination and treatment of sexual partners remains a very important aspect of individual case management on each case of gonorrhea treated in the state. The new rules and regulations not only recommend therapy for those persons exposed to the disease but emphasize complete contact tracing and educational activities necessary to prevent the disease.

The complete rules and regulations were published in *The Oklahoma Gazette*, Volume 16, Number 24, dated Thursday, December 15, 1977. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR NOVEMBER, 1977

DISEASE	November 1977	November 1976	October 1977	Total To Date	
				1977	1976
Amebiasis	—	1	3	20	13
Brucellosis	—	—	—	3	7
Chickenpox	23	50	15	964	1666
Encephalitis, Infectious	2	4	1	14	21
Gonorrhea (Use Form ODH-228)	1320	1088	1214	12256	12215
Hepatitis, A, B, Unspecified	92	97	95	744	1213
Leptospirosis	2	—	—	2	1
Malaria	—	—	—	—	3
Meningococcal Infections	1	1	1	15	21
Meningitis, Aseptic	11	3	21	76	33
Mumps	28	69	38	552	802
Rabies in Animals	8	20	19	227	165
Rheumatic Fever	—	—	—	3	13
Rocky Mountain Spotted Fever	4	2	5	72	92
Rubella	—	5	2	33	75
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	4	6	5	67	301
Salmonellosis	19	29	69	307	248
Shigellosis	11	1	14	73	169
Syphilis, Infectious (Use Form ODH-228)	6	7	7	96	78
Tetanus	—	—	—	—	—
Tuberculosis, New Active	13	28	23	211	353
Tularemia	—	1	1	12	8
Typhoid Fever	1	—	—	2	1
Whooping Cough	1	3	7	16	23

Executive Committee Puts Temporary Hold on Building Project

A project to expand OSMA headquarters by building a new 3,900 square foot building for the Oklahoma Foundation for Peer Review should be delayed until the OFPR receives a formal contract from Washington, the OSMA Executive Committee ruled at its January 8 meeting. The temporary hold was approved unanimously after OSMA Executive Director David Bickham explained that the US Office of Management and Budget had recommended recently that PSROs not be funded for the 1978-79 year. According to the OMB, PSROs have not proven to be effective in reducing costs, and if the recommendation is followed, the OFPR could be without funding during the 1978-79 fiscal year.

Bickham also told the Executive Committee, however, that since its original recommendation was filed, the OMB had reconsidered its position and had issued a report more favorable toward PSROs. According to OFPR Executive Director Ed Kelsay PSROs are now included in the President's budget, and he expects formal approval of the Oklahoma Utilization Review system (OURS) as Oklahoma's PSRO within the next month.

Due to the confusion surrounding this issue, the Executive Committee voted to take a "wait-and-see" position and delay construction of the new building until the OURS plan is indeed approved.

The Executive Committee also discussed the Oral Roberts University Medical School and Hospital project at length, deciding to defer any action on the matter at this time. OSMA President Dr C. S. Lewis, Jr., discussed the background and current status of the ORU medical complex, saying he expected the school's application for accreditation to be considered by the Liaison Council on Medical Education before mid-February. Dr Lewis and the OSMA staff presented the ORU Certificate of Need application, which had just been ruled complete, and the various merits and demerits of the program were discussed by the committee. The impact the ORU medical complex would have upon medical education in the state and Tulsa's number of hospital beds was carefully considered. After considering all items, however, the Executive Committee voted not to take any formal position on the project at that time.

In other action the Executive Committee:

- *Voted to poll OSMA members to determine if there is sufficient interest or cause to investigate a health insurance trust program for insuring OSMA members.

- *Determined that all requests for exceptions to the non-member Management and Underwriting Fee for the professional liability insurance program should be screened by the Council on Members Services and that a report on each exception request along with the Council's recommendation should be submitted to the Board of Trustees.

- *Reviewed and approved the OSMA financial report.

- *Voted unanimously to send a letter and questionnaire to all OSMA members to determine if there is interest in a group Worker's Compensation Insurance Program.

- *Voted to table any action on the Oklahoma Health Systems Plan which is being prepared by the Oklahoma Health Systems Agency. Due to the length of the plan, OSMA staff had not had the opportunity to thoroughly review it, and the Executive Committee voted therefore to take no formal position. The committee did instruct the executive director, however, to write a letter to the Health Systems Agency, asking that the Oklahoma Utilization Review System and the Physician Manpower Training Commission be mentioned in their report. □

Medical News in 1977

The year 1977 was marked by continuing progress on many fronts in the unending fight against sickness and death, the American Medical Association reports.

Dialogues continued in a number of health areas where all the facts are not yet in hand. Does saccharin cause cancer? Do X-rays of the breast for possible cancer cause more harm than good? Will Vitamin C cure the common cold? How valid is megavitamin therapy for a variety of ailments? Is biofeedback the answer to many human ills?

Perhaps the most important medical development of the year 1977 came at the year's end, with government licensing of a new vac-

cine to prevent one common form of pneumonia that kills about 25,000 Americans each year. Reports of a field trial of the vaccine held in South Africa were published in the *Journal of the American Medical Association* in December.

One of the potentially most important developments actually became known a few weeks before the end of 1976, with publication in the *Journal of the American Medical Association* of results of a field test in Iran of a new rabies vaccine. The product, developed at the Wistar Institute in Philadelphia, was used to treat 45 people bitten by rabid animals. It requires only six shots — instead of 14 to 21 in the present treatment — and has no side effects. The test was done in Iran because this nation still has a serious problem with rabies among dogs and wolves. None of the victims treated with the new serum developed rabies or had any adverse reactions to the vaccine.

Medical highlights of the year—

*Saccharine was still on sale at the end of the year, after Congress agreed on legislation to postpone a ban on its use for at least 18 months. The Food and Drug Administration had banned the artificial sweetener on the basis of animal tests which indicated it might cause cancer.

*The fad diet of the year — a liquid protein substance — was declared hazardous to health by the AMA's nutrition unit. The diet is hazardous unless administered under close supervision of a physician. At the year's end several deaths were being investigated as possibly related to the diet.

*A dramatic decline in heart disease was noted toward the end of the year. Since 1950 the rate of deaths from heart disease in the United States has dropped 30 per cent. One third of that reduction has occurred in the last five years. Modifications in life style — giving up smoking, keeping weight down, regular exercise — plus control of high blood pressure are credited for the gain.

*There was debate among experts as to whether angina from coronary disease should be treated medically, or whether surgery is preferred. A Chicago scientist indicated that the heart operations often aren't really necessary and that drugs and exercise can manage the problem effectively.

*The nation's medical leaders, including the

AMA and its Auxiliary, launched during the year an all-out drive to immunize the nation's children against communicable diseases. Studies had found that many children were not protected.

*Massive vitamin overdoses pose a new danger to the American public, the AMA's nutrition expert warns, in the wake of court decisions and congressional actions that have virtually removed all controls from packaging and sale of vitamins. "The lid is off," the AMA warned. Meanwhile, a research report in the *Journal of the AMA* said that Vitamin C had been tested carefully as a treatment for the common cold, and was found wanting.

*Laetrile continued to demand considerable attention in both medical and political circles as state legislators sought to make the controversial cancer drug legal despite its ban by the FDA. All leading scientific organizations, including the AMA, declared laetrile is worthless against cancer. But sales of the product continued, despite reports of cyanide poisoning from overdose of laetrile.

*Guidelines were offered early in the year in JAMA for mammography screening — X-ray of the breast to determine whether cancer is present. Screening was recommended for those in high risk categories and all women past 50 years. Mammography was ruled out for women under 50 without symptoms.

*Gains were reported during the year against bladder and prostate cancer, but lung cancer increased. The five-year survival rate for most cancer patients has not changed much in 25 years.

*Studies of biofeedback continued in medical and health circles. No longer a novelty, biofeedback is now a part of treatment for certain health problems in certain individuals. It is not a cureall and is not a complete therapy, behavioral researchers have found.

*A national effort was being made in 1977 to ensure that prisoners in American jails will not suffer the cruel and unusual punishment of inadequate health care. The AMA Jail Program formulated a set of minimum standards for jail health services. Six state medical societies are participating in the program, working with 30 pilot jails in gathering data and establishing pilot programs.

*Asthma sufferers were benefitting in the fall from two new drugs that have been available in Europe for many years, but only this year were licensed for use in the United States.

The two drugs have proved highly effective in relieving asthma attacks. The drugs are beclomethasone dipropionate and cromolyn sodium.

*The AMA published a new edition of its book on blood transfusions, the major change being a strong recommendation that transfusions be of red blood cells only, rather than whole blood, to reduce risk to the patient.

*A Houston surgical team reported that they had performed cardiovascular operations on more than 500 Jehovah's Witnesses without using blood transfusions. The procedure worked well and the doctors concluded that patients who refuse blood transfusions for religious reasons can undergo major cardiovascular operations with an acceptably low risk.

*Exploding pop bottles were added to the hazards of everyday living in another JAMA report this fall. More than 30,000 people are injured each year by pop bottles, the report said. Research was underway at year's end to cope with the problem.

*A new and revised edition of the AMA's manual on alcoholism indicates that real progress is being made in mobilizing the nation to deal with alcoholism. There is growing awareness that alcoholism is an illness. Meanwhile, a Canadian report in the AMA's Archives of Internal Medicine found that alcoholism is much more damaging to women than to men.

*A new treatment for hyaline membrane disease — a serious disorder in premature newborns — has made possible a substantial decrease in severe breathing problems and death in premature newborns. It involves administration of plasminogen — a substance in human blood — within 60 minutes of birth. Meanwhile, other studies found that amniocentesis properly performed is safe and useful to identify potential defects well before birth. Amniocentesis is a process in which the doctor extracts with a needle and syringe a small amount of the fluid that surrounds the fetus, for examination in the laboratory.

*The search for a treatment for acne, the plague of adolescents, got a boost during 1977 with a report from Sweden that zinc tablets are sometimes effective against the skin problem.

*A new four-drug combination treatment for advanced Hodgkin's Disease has proved effective against some cases that had previously defied other drug treatments. Hodgkin's Disease affects the lymph nodes in the neck. Untreated, it spreads and causes death. The new treat-

ment is known as BVDS, for the first letter of the name of each drug used.

*A research group in Pennsylvania has gained initial success with an experimental vaccine against gonorrhea. Further tests are under way. Gonorrhea has grown in magnitude until it is a major communicable disease, infecting some 10 million persons a year in the United States.

*Debates continued among scientists as to whether food additives cause hyperactivity in children. A report at mid-year from Wisconsin found no evidence to support the theory that first originated in California.

*A furor occurred following a report that 53 women apparently had breasts removed needlessly because of misdiagnosis. Later in the year it was determined that almost all of those who had breasts removed actually did have cancer. □

Medical School Enrollment Increases

The number of students enrolled in the 116 US medical schools in 1976-77 was 58,266, an increase of 2,022 over the previous year, says the American Medical Association's 77th annual report on medical education which was published in the December 26 issue of JAMA.

The number of first-year students increased from 15,351 to 15,667, and the number of graduates increased from 13,561 to 13,607. During the same period the total number of women enrolled increased from 1,532 to a total figure of 13,059. There were 41,394 full-time faculty members, equaling a ratio of 1 teacher for each 1.4 students. Additionally, more than 80,000 physicians and others taught part time at these medical schools.

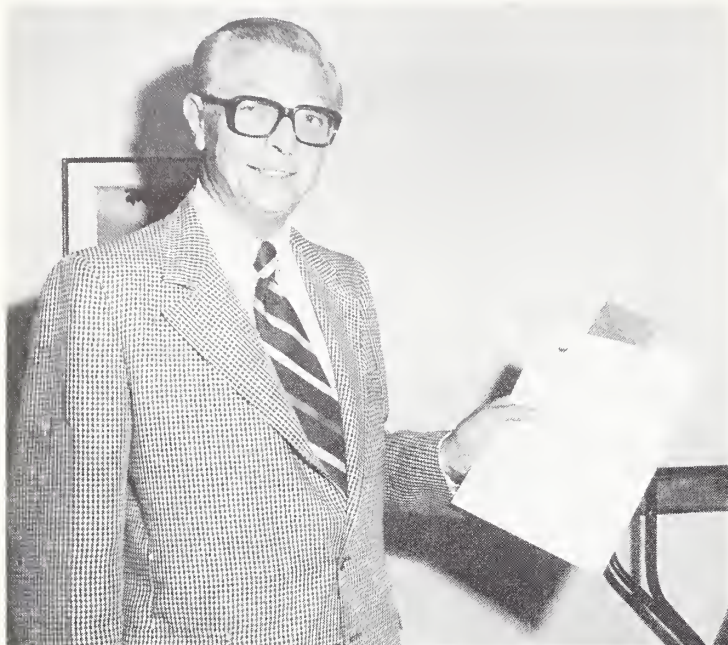
For the second time in as many years the number of applicants declined slightly. The 15,667 first-year students were selected from a total of 42,155 applicants. This total is down somewhat from the 42,624 who applied in 1974-75. Each applicant applied to an average of almost nine different medical schools, hoping to be accepted by at least one. □

OKLAHOMA MEDICAL SUMMIT PRESENTS

"UPDATE '78"

May 3-6, 1978

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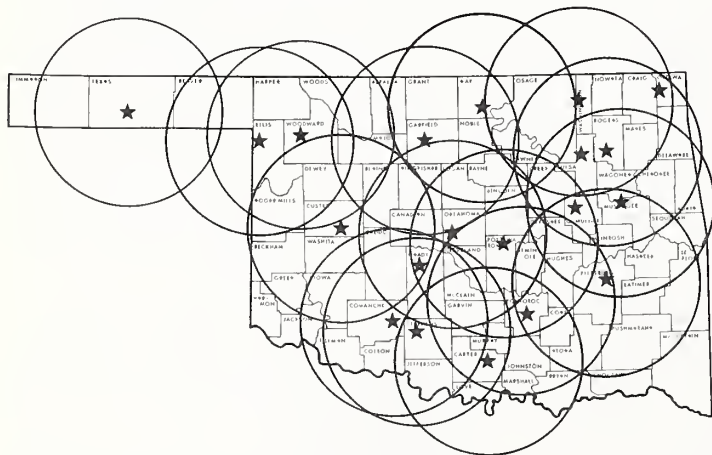
Orange M. Welborn, MD

Doctor Welborn Recognized By Cancer Center

OSMA Immediate Past-President, Dr Orange M. Welborn, is shown here displaying the recently approved letterhead and logo of the Oklahoma Cancer Center, Inc. Dr Welborn, who serves as vice-chairman of the Cancer Center's Board of Trustees and is chairman of the Board of Hospital Advisors, designed the new logo for the Cancer Center. The international stop sign over the crab symbolizes the goal of the Cancer Center . . . to stop cancer.



OKLAHOMA CANCER HOSPITAL NETWORK



The OCC was established in July, 1975, and has been designated by the National Cancer Institute to coordinate cancer activities in

Oklahoma. it consists of nearly 40 separate hospitals throughout the state which cooperate in providing the best possible cancer care. The "center-without-walls" has made a cancer center hospital available to 95 percent of all Oklahomans within 50 miles of their home. □

Cancer — Why The Crab?

The word cancer is a derivative of the Greek word for crab, karkinos. Have you ever wondered why this word was chosen as the general term for the many types of malignant tumors?

According to Michael Shimkin, cancer historian and professor of community medicine and oncology at the University of California, San Diego, the Greek physician Hippocrates introduced the term carcinoma, which later evolved into the word cancer. During Hippocrates' time, tumors were usually diagnosed by tapping the various parts of the body by hand. Most of these were solid tumors which felt hard to the touch. The physician knew these tumors attacked surrounding tissues and even other body areas. To Hippocrates, this process was analogous to the actions of a crab.

This idea, in turn, dictated the ancient treatment of cancer. The remains of a pulverized or burned crab were applied to the tumor tissue in the belief that this would cure cancer. □

(Reprint, CRTC News Notes, June 1977)

St. Francis Diabetes Center Offers Symposium

The St. Francis Diabetes Center in Tulsa will offer a symposium on juvenile and insulin dependent diabetes in Tulsa on March 10 and 11, 1978.

Speakers for the event will include the president of the American Diabetes Association, Dr Norkert Freinkel and Dr Dan Ferguson from the Joslin Clinic. The program on March 11 will be geared to allied health personnel.

Additional information may be obtained from Rita Schluneger RN, coordinator, Diabetes Education Center, 6565 South Yale, Suite 110, Tulsa, Oklahoma 74136. □

Physician Comment Sought on Changes in Ethics Code

The AMA's Judicial Council is seeking comment from physicians regarding proposed changes in the AMA's Principles of Medical Ethics. The proposed amendments to the ethics are intended to modernize the language and to clarify their meaning. The changes will be considered by the AMA House of Delegates at the Annual Convention in June, 1978, in St. Louis. The following are both the present principles and the proposed new version of the ethics code.

Present Principles of Medical Ethics

Preamble. These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

Section 1. The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man.

Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 2. Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

Section 3. A physician should practice a method of healing founded on a scientific basis; and should not voluntarily associate professionally with anyone who violates this principle.

Section 4. The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

Section 5. A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been

discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6. A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

Section 7. In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interest of the patient.

Section 8. A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

Section 9. A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Section 10. The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

Proposed New Principles of Medical Ethics

Preamble. These principles are intended to aid physicians in maintaining high standards of ethical professional conduct in their relations with patients, colleagues, members of allied professions, and the public.

One. The primary objective of the medical profession is to serve patients competently with full respect for their dignity.

Two. Physicians should strive continually to improve medical knowledge and skill and to make available to patients and colleagues the benefits of their professional attainments.

Three. A physician should not engage or participate in treatment which is not founded on a scientific basis.

Four. The medical profession should protect the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of their profession, and voluntarily accept its self-imposed disciplines. Physicians should expose, without hesitation, illegal or unethical conduct of members of the profession.

Five. Physicians may choose when they will serve except in emergencies. Competent services should be provided and continued until the physician is discharged or services are discontinued after giving adequate notice. A physician should not attempt to obtain patients by deception.

Six. Physicians should resist restraints which interfere with medical judgment and skill or cause deterioration of the quality of medical care.

Seven. Physicians are entitled to be compensated fairly for personally providing or super-

vising the medical care of patients. A commission should not be paid nor accepted for the referral of patients.

Eight. A physician should seek consultation upon request or whenever it may benefit the patient.

Nine. A physician may not reveal confidences entrusted during medical attendance or deficiencies observed in the character of patients, unless required to do so by law or it becomes necessary in protecting the welfare of the patients or the community.

Ten. In addition to providing care to patients, the physician has a social responsibility to participate in activities intended to improve the health of the community. ☐

DATES TO REMEMBER

Board of TrusteesFebruary 11, 1978
(OSMA Headquarters)
Council on Medical EducationFebruary 12, 1978
(OSMA Headquarters)
Council on Planning and
DevelopmentApril 8-9, 1978
(Sheraton Century Center, Oklahoma City)
Oklahoma Medical SummitMay 3-6, 1978
(Skirvin Plaza Hotel and Sheraton Century
Center, Oklahoma City)

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DEATHS

LOUISE KINKEAD FARR, MD
1909-1978

Retired, Oklahoma City physician, Louise Kinkead Farr, MD, died January 10, 1978. Dr Farr, a native of Walker, Missouri, received her medical degree from the University of Oklahoma College of Medicine in 1943 and was a family physician until 1953. For the next ten years, she was Oklahoma City school physician. Upon her retirement last year, she became Director of the Mental Health Committee at Central State Griffin Memorial Hospital in Norman. She was a member of the American Psychology Association, the American Women's Medical Association and the Oklahoma City Clinical Society.

WILLIAM M. MUSSIL, MD
1898-1977

Oklahoma City otolaryngologist and ophthalmologist, William M. Mussil, MD, 79, died December 27, 1977. Dr

Mussil had retired from active practice in 1974. A native of Ennis, Texas, he graduated from Baylor University School of Medicine in 1924 and established his practice in Oklahoma City in 1927. Dr Mussil was a member of the Southern Medical Association, the American Academy of Ophthalmology and Otolaryngology. In 1974 he was presented a Life Membership in the Oklahoma State Medical Association.

JOHN L. LeHEW, JR., MD
1901-1978

A pioneer, Guthrie physician, John L. LeHew, Jr., MD, died January 9, 1978, in Oklahoma City. He had practiced in Guthrie since 1927. A native of Pawnee, Oklahoma, Dr LeHew was graduated from the University of Oklahoma College of Medicine in 1927. For his outstanding service to humanity and the medical profession, he was awarded a Life Membership in the Oklahoma State Medical Association in 1974. □

PRA Recipients Named

January 1, 1978, ushered in both a new year and a new program of continuing medical education for OSMA members. As most physicians know by now, in order to remain members of their state medical association, each must have earned an active AMA Physicians Recognition Award by January 1, 1981. So what was formerly a purely voluntary program is now a requirement in Oklahoma; what formerly indicated exemplary educational activities will now be the mean in this state.

Listed below are OSMA members who received Physicians Recognition Awards during the period of July-November, 1977. Each of these physicians received their award before it became a membership requirement.

Physician Recognition Award Recipients: July, 1977 Through November, 1977

Robert Daniel Basta	Fort Sill
Eugene S. Bell	Tishomingo
John A. Blaschke	Oklahoma City
Robert Walter Block	Tulsa
William Lawrence Bond	Oklahoma City
Reece Richard Boone	Watonga
George Sauter Bozalis	Oklahoma City
Philip Clay Bryan	Miami
Tim Symmes Caldwell	Tulsa
Stephen Bill Campbell	Tulsa
Charles Allen Carmack	Oklahoma City
Larry Wayne Cartmell	Ada
William Patrick Chamberlain	Muskogee
Jesse S. Chandler	Muskogee
Robert Bruce Chatfield	Ada
James Price Cobb	Norman
James Robert Colvert	Oklahoma City
Alice D. Cox	Hugo
Ronald I. Cramer	Oklahoma City
Carmelina C. DeLaPaz	Ponca City
Stanley Deutsch	Oklahoma City
Jimmy Don Dixon	Guthrie
William Henry Dudney	Tulsa
Harold Earl Dunlap	Tulsa
Robert Richard Edde	Weatherford
Joyce M. Eisenbraun	Oklahoma City
Charles Caleb Elliott	Chickasha
John Wesley Ellis	Pauls Valley
William M. Featherston	Elk City
Hervey A. Foerster	Oklahoma City
Kurt Smith Frantz	Enid
Ronald Lee Gillum	Oklahoma City
Jess D. Green	Bartlesville
Michael Robert Grossman	Oklahoma City
Carl H. Guild	Bartlesville
James L. Haddock	Norman
Jack Edward Hale	Tulsa
Michael Rowe Harkey	Oklahoma City
Lynn H. Harrison	Oklahoma City

Joseph R. Henke	Guthrie
Jos. Regnald Henning	Norman
Francis W. Hollingsworth	El Reno
Douglas Charles Hubner	Tulsa
Nicholas Maxwell Jackson	Oklahoma City
Thomas Harold Johnson	Oklahoma City
Michael Lee Jordan	Pawhuska
James Robert Kay	Norman
Robert Christian Kiess	Poteau
Robert W. King	Oklahoma City
Phillip N. Kingery	Mangum
Hrair Toros Kurkjian	Oklahoma City
Perry Albert Lambird	Oklahoma City
Justin Paul LeVasseur	Oklahoma City
Gary Melvin Lee	Muskogee
Robert L. Lembke	Ponca City
Achilles C. Lisle	Oklahoma City
James D. Loudon	Shawnee
Jimmy Charles Martin	Cushing
Donald Forsyth Mauritsen	Tulsa
Charles Howard McCarty	Tulsa
Joe Wheeler McCauley	McAlester
William George McCreight	Oklahoma City
James William McDoniel	Chickasha
Ray V. McIntyre	Kingfisher
Irwin Chester McLendon	Oklahoma City
Noel Eugene Miller	Okemah
Dan Mitchell	Enid
David Paul Mitchell	Oklahoma City
Eldon C. Mohler	Ponca City
Ervin Ronald Orr	Chickasha
Randel Andrew Patty	Claremore
Luther T. Pennington	Ada
Malcom E. Phelps	El Reno
David James Pillow	Tulsa
Paul T. Powell	Ponca City
Paul Robert Prescott	Moore
Paul Harvey Rempel	Enid
Ransom F. Ringrose	Guthrie
Vance Ike Robideaux	Oklahoma City
Malcolm George Robinson	Oklahoma City
David Gerald Rogers	Oklahoma City
Paul David Rothwell	Bethany
Robert Ray Rupp	Sand Springs
William Jay Sahl	Oklahoma City
S. S. Sanbar	Oklahoma City
Hobart Curtis Sanders	Tulsa
Russell Alan Sather	Oklahoma City
Wilmer George Sheldon	Ponca City
Richard G. Shifrin	Oklahoma City
Lawrence Edward Silvey	Bethany
Harold G. Sleeper	Spencer
Henry Clinton Smith	Lawton
Raymond Orval Smith	Oklahoma City
James Jefferson Snipes	Tulsa
Darrel L. Speed	Ada
Stephen Singleton Stotts	Ponca City
Gary Franklin Strebel	Oklahoma City
Jagannath S. Surpure	Edmond
Thomas Jackson Taylor	Oklahoma City
Harlan Thomas	Tulsa
Jerry Robert Troy	McAlester
Thomas R. Turner	Tulsa
Paul Neeley Vann	Lawton
Rama K. T. Varma	Chickasha
John Henry Walsh	Enid
Roland A. Walters	Oklahoma City
Floyd Edmond Webb	Tishomingo
Walter Wicker	Lawton
Avery Bruce Wight	Enid
Ralph Courtney Wilson	Oklahoma City
Robert G. Wilson	Shawnee
Morris J. Wizenberg	Oklahoma City
Larry Ivan Young	Claremore

Interim Health Manpower
Report Completed

Editor's Note: The following information is taken from the Oklahoma Interim Health Manpower Report, 1977, which was completed last December. It was prepared by the Oklahoma Interagency Task Force for Health Manpower Data under the direction of Vivian S. Smith, PhD. Assisting in the report was Charlotte Leach of the Oklahoma Health Planning Commission and Jan Asal of the Oklahoma Health Systems Agency. The information on medical doctors was provided largely by the Oklahoma State Medical Association and the Oklahoma Board of Medical Examiners. The purpose of the report is to identify both the numbers of health personnel currently in practice in Oklahoma and also to identify future needs. This interim report updates a report which was released in 1975. Information listed in this report is based upon data available in October, 1977.

General Information

In the summer of 1977 there were 3,300 medical doctors living in Oklahoma and eligible to practice medicine in this state. During the previous year approximately 260 physicians entered Oklahoma from other states, and about 120 left Oklahoma for practice opportunities elsewhere. Family considerations were identified as a primary factor affecting interstate moves with work satisfaction and income potential next in importance. According to the report 31 percent of the graduates at the University of Oklahoma College of Medicine established practices in Oklahoma City or Tulsa, 28 percent established practices in other parts of the state, and 41 percent left Oklahoma. The average Oklahoma medical doctor, says the report, practices for 35-40 years, as compared with the national average of 30-35 years. About 5 percent of all Oklahoma medical doctors are women, and about 10 percent are black. The report listed no information for other minorities. About 7.5 percent are graduates of foreign medical schools.

Less than five percent of Oklahoma doctors work part time as compared with five to ten percent nationally. About 30-35 percent work in more than one setting (as consultants, teachers, etc.) in addition to clinical practices. Eighty percent work primarily in private offices, 10 percent in hospitals and 10 percent in clinics. In 1977, 153 physicians were graduated

from the University of Oklahoma College of Medicine, with an expected graduation in 1978 of 152. There are 160 first-year MD residences available in 1977-78, including all specialties. An increase of 62 residency positions is projected for 1978-79.

Medical Specialties

A listing of MD specialists by county as of October, 1977, is shown below. Family practice and general practice physicians are omitted. Counties not listed have no specialists. This list includes both board certified specialists and physicians, indicating they are board eligible.

MEDICAL SPECIALISTS

Alfalfa:	
General Practice-Surgery	1
Beckham:	
General Practice-Surgery	2
Obstetrics-Gynecology	1
Otolaryngology	1
Pediatrics	1
Radiology	1
Surgery	1
Blaine:	
Emergency Medicine	1
Bryan:	
General Practice-Surgery	2
Otolaryngology	1
Radiology	1
Caddo:	
General Practice-Surgery	2
Surgery	1
Canadian:	
General Practice-Surgery	3
Ophthalmology	1
Otolaryngology	1
Carter:	
Anesthesiology	2
Arthritis-Rheumatism	2
General Medicine-Heart Disease	1
General Practice-Surgery	2
Internal Medicine	5
Rheumatology	3
Obstetrics-Gynecology	4
Ophthalmology	1
Orthopedic Surgery	2
Otolaryngology	4
Pathology	2
Pediatrics	2
Physical Medicine-Rehabilitation	1
Radiology	3
Surgery	3
Urology	1

news

Cherokee:

Emergency Medicine	2
General Practice-Surgery	1
Obstetrics-Gynecology	2
Ophthalmology	1
Pediatrics	1
Radiology	3
Surgery	

Choctaw:

Radiology	1
Surgery	

Cleveland:

Anesthesiology	3
Dermatology	2
Emergency Medicine	2
General Practice-Psychiatry	1
General Practice-Surgery	2
Internal Medicine	10
Cardiology	1
Gastroenterology	1
Pulmonary Disease	1
Neurology	2
Obstetrics-Gynecology	5
Ophthalmology	3
Orthopedic Surgery	4
Otolaryngology	1
Pathology	5
Pediatrics	6
Preventive Medicine	1
Psychiatry	20
Radiology	6
Surgery	6
Urology	2

Coal:

Internal Medicine	1
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Comanche:

Anesthesiology	4
Dermatology	2
Emergency Medicine	3
General Practice-Pediatrics	1
Psychiatry	1
Surgery	2
Internal Medicine	8
Cardiology	1
Obstetrics-Gynecology	6
Ophthalmology	2
Orthopedic Surgery	7
Otolaryngology	3
Pathology	3
Pediatrics	4
Psychiatry	1
Radiology	5
Surgery	4
Thoracic Surgery	2
Urology	2

Craig:

Anesthesiology	1
General Practice-Surgery	1
Psychiatry	3

Creek:

Emergency Medicine	1
General Practice-Surgery	1
Internal Medicine	1
Surgery	1

Custer:

Emergency Medicine	1
General Practice-Surgery	3
Orthopedic Surgery	1
Radiology	1
Surgery	2
Urology	1

Delaware:

Obstetrics-Gynecology	1
Pediatrics	1

Dewey:

Internal Medicine	1
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Ellis:

Internal Medicine	1
Orthopedic Surgery	1
Surgery	2
Thoracic Surgery	1

Garfield:

Anesthesiology	1
Dermatology	1
General Practice-Surgery	3
Internal Medicine	6
Surgery	1
Obstetrics-Gynecology	4
Ophthalmology	3
Orthopedic Surgery	6
Otolaryngology	3
Pathology	2
Pediatrics	3
Psychiatry	2
Radiology	5
Surgery	5
Urology	4

Garvin:

Internal Medicine	1
Surgery	1

Grady:

Emergency Medicine	1
Internal Medicine	6
Gastroenterology	1
Neurology	1
Obstetrics-Gynecology	2
Orthopedic Surgery	1
Otolaryngology	1
Pathology	1
Pediatrics	3
Radiology	3
Surgery	4
Thoracic Surgery	1
Urology	1

Grant:

Pediatrics	1
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Greer:	
Radiology	1
Haskell:	
General Practice-Surgery	1
Hughes:	
Anesthesiology	1
Orthopedic Surgery	1
Pathology	1
Surgery	1
Jackson:	
Emergency Medicine	3
Internal Medicine	1
Obstetrics-Gynecology	1
Orthopedic Surgery	3
Ophthalmology	2
Pediatrics	1
Urology	1
Jefferson:	
Surgery	1
Kay:	
Anesthesiology	1
Emergency Medicine	2
General Practice-Surgery	1
Industrial Medicine	2
Internal Medicine	3
Cardiology	2
Obstetrics-Gynecology	4
Ophthalmology	2
Orthopedic Surgery	1
Otolaryngology	1
Pathology	1
Pediatrics	2
Psychiatry	3
Radiology	1
Surgery	1
Urology	2
Kingfisher:	
General Practice-Surgery	1
Kiowa:	
General Practice-Surgery	1
LeFlore:	
Emergency Medicine	2
General Practice-Pediatrics	1
Surgery	1
Surgery	1
Lincoln:	
Internal Medicine	2
Surgery	1
Logan:	
Family Practice-Surgery	2
Internal Medicine	2
Ophthalmology	1
Radiology	1
Urology	1
Mayes:	
Internal Medicine	2
Radiology	1

Surgery	2
Urology	1
McClain:	
Emergency Medicine	1
McCurtain:	
Internal Medicine	1
Radiology	1
Muskogee:	
Anesthesiology	1
Endocrinology	
Dermatology	1
General Practice-Surgery	4
Internal Medicine	12
Endocrinology	2
Pulmonary Disease	1
Neurosurgery	1
Obstetrics-Gynecology	6
Ophthalmology	3
Orthopedic Surgery	6
Otolaryngology	2
Pathology	4
Pediatrics	3
Psychiatry	3
Radiology	7
Surgery	8
Thoracic Surgery	1
Urology	4
Oklahoma:	
Allergy	11
Anesthesiology	54
Arthritis-Rheumatism	2
Aviation Medicine	2
Cardiology	12
Cardiovascular	7
Chest Diseases	3
Dermatology	18
Emergency Medicine	22
Endocrinology	
Gastroenterology	2
Gynecology	2
Hematology	6
Industrial Medicine	4
Internal Medicine (and subspecialties)	156
Neurology	9
Neurosurgery	13
Obstetrics-Gynecology	58
Ophthalmology	38
Ophthalmology-Otolaryngology	3
Otolaryngology	22
Orthopedic Surgery	37
Pathology	39
Pediatrics	68
Plastic Surgery	14
Preventive Medicine	4
Proctology	2
Psychiatry	62
Pulmonary Disease	
Radiology	64
Surgery	58
Thoracic Surgery	16
Thyroid Surgery	1
Vascular Surgery	2
Urology	23

news

Okmulgee:

Emergency Medicine	1
General Practice-Surgery	1
Internal Medicine	4
Obstetrics-Gynecology	2
Orthopedic Surgery	1
Otolaryngology	1
Pediatrics	2
Radiology	1
Surgery	2

Osage:

Pediatrics	1
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Ottawa:

General Practice-Surgery	2
Obstetrics-Gynecology	1
Orthopedic Surgery	1
Pediatrics	1
Radiology	1
Surgery	2

Pawnee:

General Practice-Surgery	1
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Payne:

Anesthesiology	1
Emergency Medicine	2
General Practice-Surgery	1
Internal Medicine	6
Gastroenterology	1
Obstetrics-Gynecology	5
Ophthalmology	2
Otolaryngology	1
Orthopedic Surgery	2
Pathology	2
Pediatrics	1
Psychiatry	1
Radiology	4
Surgery	4
Urology	1

Pittsburg:

Emergency Medicine	2
General Practice-Surgery	3
Internal Medicine	3
Obstetrics-Gynecology	2
Ophthalmology	1
Orthopedic Surgery	2
Otolaryngology	1
Pathology	1
Pediatrics	2
Psychiatry	1
Radiology	3
Surgery	2
Urology	1

Pontotoc:

Anesthesiology	1
Internal Medicine	7
Cardiology	1
Obstetrics-Gynecology	3
Ophthalmology	2

Orthopedic Surgery	2
Otolaryngology	1
Pathology	2
Pediatrics	3
Psychiatry	1
Radiology	3
Surgery	2
Urology	1

Pottawatomie:

Emergency Medicine	1
General Practice-Surgery	1
Internal Medicine	10
Endocrinology	1
Obstetrics-Gynecology	4
Ophthalmology	1
Orthopedic Surgery	3
Otolaryngology	1
Pathology	3
Pediatrics	5
Psychiatry	1
Radiology	2
Surgery	6
Urology	1

Pushmataha:

Family Practice-Pediatrics	1
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Rogers:

Internal Medicine	3
Obstetrics-Gynecology	2
Pediatrics	1
Psychiatry	1
Radiology	1
Surgery	2

Sequoyah:

Obstetrics	
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Stephens:

Anesthesiology	1
General Practice-Surgery	2
Internal Medicine	1
Obstetrics-Gynecology	1
Radiology	1
Surgery	1
Thoracic Surgery	1

Tillman:

Pediatrics	
Surgery	1

Tulsa:

Allergy	4
Anesthesiology	34
Cardiology	8
Dermatology	13
Emergency Medicine	20
Endocrinology	
Gastroenterology	
Hematology	1
Industrial Medicine	9
Internal Medicine (including subspecialties)	111
Nephrology	2

Neurology	8
Neurosurgery	9
Nuclear Medicine	
Obstetrics-Gynecology	54
Oncology	
Ophthalmology	25
Ophthalmology and Otolaryngology	
Otolaryngology	14
Orthopedic Surgery	32
Pathology	22
Pediatrics	51
Physical Medicine & Rehabilitation	2
Plastic Surgery	6
Proctology	3
Psychiatry	31
Pulmonary Diseases	
Radiology	41
Rheumatology	
Surgery	55
Thoracic Surgery	15
Urology	18

Oklahoma Medical Doctors by County

County	Total	
	Population	Physicians
Adair	17,000	3
Alfalfa	7,500	1
Atoka	11,500	2
Beaver	6,200	3
Beckham	16,200	16
Blaine	12,600	11
Bryan	27,200	12
Caddo	31,900	8
Canadian	45,300	18
Carter	41,900	51
Cherokee	25,800	16
Choctaw	16,700	5
Cimarron	3,900	2
Cleveland	101,800	116
Coal	6,100	3
Comanche	109,200	91
Cotton	6,900	1
Craig	14,600	12
Creek	50,600	20
Custer	22,300	21
Delaware	20,000	7
Dewey	5,700	2
Ellis	5,300	7
Garfield	60,500	70
Garvin	27,200	11
Grady	34,800	35
Grant	7,200	2
Greer	7,800	8
Harmon	5,100	1
Harper	5,400	3
Haskell	10,500	2
Hughes	13,800	12
Jackson	34,700	24
Jefferson	8,100	7
Johnston	9,100	4
Kay	49,300	53
Kingfisher	13,600	8
Kiowa	12,400	5
Latimer	9,800	2
LeFlore	36,200	19
Lincoln	21,800	8
Logan	22,400	10
Love	6,800	1
Major	8,200	1
Marshall	8,900	2
Mayes	27,900	9
McClain	18,800	5
McCurtain	36,000	6
McIntosh	13,900	5
Murray	10,600	4
Muskogee	63,800	92
Noble	10,800	5
Nowata	10,500	2
Okfuskee	11,600	5
Oklahoma	543,800	1315
Okmulgee	36,300	23
Osage	32,600	9
Ottawa	31,600	15
Pawnee	13,500	6
Payne	57,400	56
Pittsburg	37,600	33
Pontotoc	31,200	40
Pottawatomie	50,600	50

Wagoner:

Obstetrical & Gynecological Surgery	
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Washington:

Anesthesiology	6
Dermatology	1
General Practice-Surgery	1
Industrial Medicine	5
Internal Medicine	8
Cardiology	1
Obstetrics-Gynecology	3
Ophthalmology	4
Orthopedic Surgery	3
Otolaryngology	2
Pathology	3
Pediatrics	5
Psychiatry	1
Radiology	5
Surgery	3
Thoracic Surgery	1
Urology	2

Washita:

Obstetrics-Gynecology	1
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Woods:

General Practice-Surgery	1
Surgery	1

Woodward:

General Practice-Psychiatry	1
Surgery	2
Internal Medicine	1
Psychiatry	2
Surgery	1

Note: Cleveland, Craig, and Woodward counties are the sites of large mental hospitals, so the number of psychiatrists is larger than might be expected in a non-metropolitan area.

Sources: Oklahoma State Board of Medical Examiners

news

Pushmataha	10,500	4
Roger Mills	4,600	1
Rogers	34,300	15
Seminole	27,800	12
Sequoyah	26,800	4
Stephens	38,900	27
Texas	18,500	8
Tillman	12,300	4
Tulsa	422,800	734
Wagoner	27,400	3
Washington	42,500	65
Washita	13,000	4
Woods	10,700	6
Woodward	17,600	15

Book Reviews

Fundamentals of Clinical Hematology, 4th edition, edited by B. S. Leavell and O. A. Thorup, Jr., 755 pages, Philadelphia, W. B. Saunders Company, \$25.00.

Doctors Leavell and Thorup in the 4th edition of their textbook continue to provide a book which is aimed mainly at students, house officers and practicing physicians rather than specialists in hematology. The general format follows previous editions. Each chapter begins with a classification of the disease followed by a concise discussion of its pathophysiology. Emphasis is on mechanisms of the disease rather than clinical features in many cases. Many chapters have been rewritten, particularly those dealing with immunology, red cell metabolism and coagulation. An effort has been made to present recent advances in hematology with emphasis on understanding of the basic mechanism of diseases. The book continues to be clear, well-written and very readable. The illustrations are of a good quality. Some of the outdated references could have been deleted, but all in all the reference lists are current and up-to-date.

The book can be well-recommended to those for whom it has been designed. *Harris D. Riley, Jr., MD*

Current Pediatric Therapy, 7th edition, S. S. Gellis and B. M. Kagan, 781 pages, Philadelphia, W. B. Saunders Company, 1976, \$28.50.

This is the 7th edition of this well-known book edited by Gellis and Kagan. It contains almost 800 pages and covers the treatment of virtually every disorder of infants and children. With each edition, the authors change to give new outlooks on approaches to various disorders. It can be recommended as a broad general guide for pediatric therapy. *Harris D. Riley, Jr., MD*

The Scientific Journal: Editorial Policies and Practices; Guidelines for Editors, Reviewers and Authors by Lois DeBakey, 129 pages, St. Louis, C. V. Mosby Company, 1976, price \$9.95.

For several years a group of medical editors communicated about editorial practices and policies. Doctor Lois DeBakey, in collaboration with several others, has pulled together the results of these discussions in a most admirable fashion. The book is divided into two general sections: editorial policies and editorial practices. The book offers guidelines on handling and review of manuscripts with consideration of the various specific types. It also provides discussion of format, organization, editorial responsibilities and a variety of other topics. There is also a discussion of ethical, legal and technical problems. The coverage is chronologically systematic. It will prove to be a valuable reference for editors and publishers. *Harris D. Riley, Jr., MD*

Lung Liquids, Ciba Foundation Symposium, 38 (new series) 330 pages, New York, Elsevier Company, price \$23.95.

The purpose of this 1975 Ciba Symposium was to bring together pulmonary physiologists, membrane physiologists and clinicians to review the subject of lung water and solutes including composition, location and control. The monograph includes 17 formal papers and as usual informal discussions following each presentation. The nature of this book limits its general appeal but it will serve as a valuable reference for anyone concerned with newer concepts of the contribution of fluids and solutes to pulmonary function. *Harris D. Riley, Jr., MD* □

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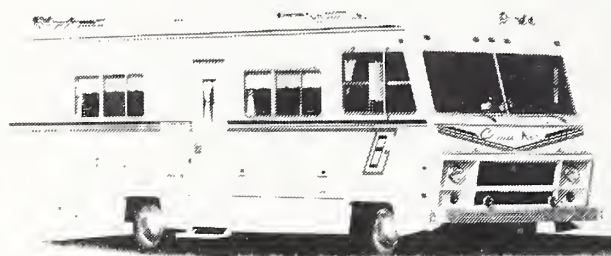
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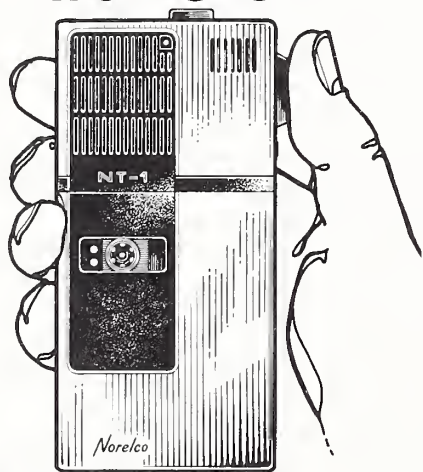


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"Publish or Perish"

ERNEST LACHMAN, MD

I have before me a cartoon from the "New Yorker" which shows a blindfolded man in shirtsleeves, leaning against a stone wall. He faces a firing squad of about 10 men in academic attire with rifles aimed at him. On the sideline stands the apparent commander of this group, also in cap and gown, speaking to a visitor standing next to him. Apparently referring to the commander's explanation to the questioner, the legend reads: "It's publish or perish and he hasn't published."

Translating this metaphorical explanation into the language of academe, it signifies that the culprit has not attained any outside financial research support and therefore deserves to be penalized by lowering his academic status and prestige. It also implies deprivation of salary increases, promotions or tenure, and decrease in the size of his office and laboratory.

It might be worthwhile to investigate this state of affairs, limiting the discussion to the medical sciences with particular attention to the basic sciences in colleges of medicine. A clinician, in addition to his teaching and service activities, can always publish statistical surveys in diagnostic and therapeutic medicine, which are essentially done by auxiliary personnel, or anecdotal case studies. The value of these activities however should not be underestimated.

By contrast, the basic science faculty member, particularly in underfinanced state schools, faces a different problem. During the last few years his teaching activities have been greatly increased due to the larger size of the student body and a decrease in the faculty-student ratio. He must try, in spite of less intimate contact and diminished acquaintance with the individual student, to personalize his teaching activities and to continue his counseling of students with learning problems. His lectures should be inspiring and dramatic enough to hold the students' attention in the setting of larger classrooms and should supplement the textbooks by clarification of difficult concepts and by additional interesting and pertinent information, such as references to the clinical application of the material cov-

ered. Examinations should be re-designed when the course is repeated in order to update the knowledge tested and to evaluate the reasoning power of the student in the use of the acquired factual material. In some way lectures and group discussions will have to compensate for the decrease in laboratory time. The examinations should certainly be utilized as a learning experience. It is fair to say that the state legislatures which appropriate the necessary funds, expect every faculty member to select teaching methods that enhance the opportunity for producing competent and conscientious physicians. For the time being legislators in small and less-well-endowed states are not particularly interested in producing scientists in their state medical colleges. They like to leave this task to better financed federal, state, or private research departments, institutions, and foundations.

On the other hand, the governing administrative officers of the underfinanced colleges expect from all faculty members a respectable research output to be published in peer-reviewed scientific journals and essentially financed by outside federal or private agencies. The rationale of these expectations is the creation of a more prestigious institution with a fair-sized number of nationally known and recognized faculty members. The administrative officers also have an eye on the additional financial support for the institution as a whole that is created by the scientific activities of such faculty members. Thus the academic staff member is expected, in addition to his committee activities and to his considerable teaching assignments (the term "teaching load" is odious and should be eliminated), to turn out publishable research. Many medical colleges set aside a block of time for the latter during which the faculty member is more or less inactive as a teacher.

The question arises whether this is feasible or even advisable. Those individuals that are particularly research-minded will follow their inclinations, often at the expense of the quality of their teaching, and many that enjoy their teaching activities will, if pressure is exerted, produce research findings of varying or ques-

editorial

tionable value. There are, of course, a number of individuals who can combine satisfactorily their research and educational endeavors, but it is doubtful that they are in the majority. Productive and innovative investigational activities require an active and enthusiastic research environment, which includes a voluminous and updated library, extensive research equipment and full-time technical personnel.

If a faculty member executes his research program only on a part-time basis, supporting personnel and valuable instruments may be wasted and the latter may become prematurely obsolete. In recent years there also has been an ever-increasing curtailment of federal research funds and the private and philanthropic institutions have not taken up the slack, so that only the most productive faculty members qualify for outside support. Thus, in spite of the profound and urgent need for fundamental research in biomedicine, we have to ask ourselves whether educators are necessarily the optimal source of productive research.

It is the purpose of this editorial to draw attention to the obvious dilemma of the underfinanced medical colleges. A compromise solution seems at hand, for the development of which I acknowledge my indebtedness to the well-known educator and scholar, Jacques Barzun. The backbone of every biomedical teaching department should be the scholarly teacher or scholar-teacher, as Barzun calls him. He is an educator who "loves teaching, does it well, and continues to study his subject." (Barzun) To this I should like to add that the definition of scholarly teacher implies that he keep up with the interfaces of his area of interest with other basic sciences and that he familiarize himself with recent applications of his field to clinical medicine. Such a man is respected by clinicians for his basic knowledge and often is invited to participate in their conferences, grand rounds, and teaching clinics. The definition does not in the least give the academic member a franchise to use his old lecture notes or examinations and foster his popularity among the students by being affable and easily approachable. He may use his spare time to keep posted in the areas outlined above, he may also author textbooks and monographs or design new audiovisual aids and other learning resources, or may actually

do some research to the extent that his time allows. The priority, however, rests on his well-grounded teaching activities in medical, dental, and paramedical education. No stigma should be attached to the faculty member who qualifies under this definition. He should be held in equal esteem as the researcher and should be treated the same as to emoluments and perquisites. Active investigators should be included among the academic staff to the extent that the budget allows. There is however greater difficulty in justifying to governing bodies and fiscal agencies the employment of academicians whose activities are essentially confined to productive research.

The question has been raised: why not leave these tasks to institutions that are specifically designed for this purpose? The answer is manifold. The presence of research academicians is required if the institution intends to participate in the training of graduate students which most certainly includes their introduction into the methodology and principles of research. These graduate students are, after all, our future teachers and researchers, who even while they are in training participate actively and productively in the educational programs of all students. Junior faculty members are hired from an available pool that constitutes the output of graduate schools. It seems unfair to drain this pool without contributing to its replenishment. Moreover, the research-oriented staff member keeps his teaching colleagues informed of advances in their fields. Through seminars and informal discussions he contributes to the scientific atmosphere which distinguishes an academic institution from a trade school. Moreover, the medical student who is exposed to the researcher in occasional lectures, informal discussions, and perhaps through active participation in his ongoing research during vacation time, perceives the idea that medical science continuously progresses through active research. Academically oriented clinicians likewise profit from the presence of the investigator by having the opportunity to familiarize themselves with basic advances in the sciences and utilize these colleagues in joined research, seminars and consultations.

Although not as euphonic and alliterative as the title of this editorial, we should prefer to change it to a slogan that sounds less cruel and more attuned to our time: Be a researcher OR a scholarly teacher. □

The problems facing the Health Care Industry have been clearly identified by health economists, politicians, pollsters and our own professional organizations. The manner in which they are resolved will determine the outcome of the current debate on national health insurance. If the industry can address the problems and arrive at publicly acceptable solutions then health care can continue to be delivered largely within the framework of the free-enterprise system. If it cannot, then additional government controls are forthcoming to the extent that we will deliver our services within a socialized system.



Some of us had the opportunity to witness Britain's National Health Service recently and none of us really want that for our patients, our intellectual freedom and integrity, nor for our economic well-being. Capitalism creates incentives that reward both the patient and the physician. Socialism has catastrophic effects upon desire, achievement, hard work, and results in a standard of care which is less than acceptable to the American people.

Thus, we are cast into a unique role; we are our patients' physicians using our knowledge to prescribe healing remedies and we are at the same time a public defender . . . trying to protect our patients collectively from a system of medicine that is not in their best interests.

To argue that we are not responsible for high costs, inaccessibility and isolated cases of poor quality is academic. Public opinion polls show that our patients feel that we are the most capable of helping solve these problems. Likewise, to argue that the health care crisis has been manufactured by politicians, labor leaders and liberals is time consuming and an exercise in futility. While the majority of our patients have overwhelming confidence in us, 61 percent of the population feel that a national health insurance plan is necessary to correct the inequities of the existing health care system.

The issues are clear cut though complex: We must demonstrate that we are concerned about costs and we must help educate our patients about their responsibilities for the cost of *their* medical care; we have begun. The OURS program is a national example of cost containment and the creation of the Oklahoma Health Council is further evidence of our willingness to deal with this major issue.

We must assist in assuring the public that access to medical care is not house calls, nor physicians practicing in small towns with inadequate facilities, nor marginal health care practitioners who purport to substitute for physicians. We must convince them

that time is more critical than distance and that unnecessary trips to hospital emergency rooms are wasteful. We must stress the continuing physician-patient relationship and that preventive medicine is a real thing that patients practice, *not* physicians.

We should support programs that encourage young doctors to locate in needy areas but we should protect their professional freedom, as we cherish ours. We have demonstrated our leadership in this area also. The Foundation for Community Medical Care and the Physician Manpower Training Commission have contributed significantly to better distribution of our medical school graduates — both of these programs have been emulated by other states.

It is indeed strange that the quality of medical care should be of major concern to the general public. Our graduates are better trained, by better schools and work in better facilities than any others in the world. We are capable of delivering more and better medical care than ever before. Except for isolated segments of our population we are healthier than any previous generation.

Why then at this point in our nation's history should the most disciplined of the sciences receive such severe criticism for doing things better than we have ever done before. This is an enigma for which each has his own solutions. The facts are that the public — as evidenced by a continuing rise of malpractice claims — is willing to challenge the prescription for care rendered by his personally selected physician.

We are fortunate in Oklahoma . . . thus far our patients have reacted contrary to the national trend. Our juries have exercised restraint and our members pay the lowest malpractice rates in the nation. We have also dedicated ourselves to continuing competence by requiring a prescribed number of hours of continuing medical education each year. Our effective Peer Review Committee is an important factor in our continuing review of the quality of care rendered by association members.

It is essential that we join with our health industry partners in attempting to solve these critical health issues and we should bring to the forum our best minds and talents; we should strive with all our being to resolve the issues to the satisfaction of all. But, we should enter the debate with some clear understandings.

We have demonstrated our willingness to help solve the problems already; we too are concerned — about our freedom to practice, about our families and about our patients. We are trained to deliver individualized medical care to individuals, that is what our patients want, and in the final analysis, that is to whom we will respond.

C. S. Lewis, Jr., M.D.

Comparison of Paired Midstream Voided and Catheterized Urine Samples From Female Patients in a General Hospital

WILLIAM F. BARNES, MD
DONALD D. ALBERS, MD

The reliability of cultures and microscopic urinalysis of midstream clean-catch specimens in detecting bacteriuria in women in a general hospital has been investigated. A routine urinalysis appears to be an unreliable indicator of infection in many patients.

The "clean-catch" technique of obtaining urine for microscopic analysis and culture is the preferred method of urine collection because of its convenience and also because of the risk of infection associated with urethral catheterization. Although reliable under ideal conditions, this technique is not without shortcomings.¹⁻⁹ This investigation was prompted by concern over the validity of self-collected, midstream clean-catch urine samples by female patients in general hospitals. In

addition to comparing the reliability of this method with that of catheterized urine collection, we also evaluated the accuracy of the microscopic urine sediment examination for determining urinary tract infection.

PATIENTS AND TECHNIQUE

One-hundred preoperative patients admitted to the gynecologic service were instructed to collect midstream urine for microscopic analysis and culture. Patients cleansed themselves with a povidone-iodine solution and collected samples. Thirty minutes later, licensed nurses using sterile technique collected urine samples from these same patients by urethral catheterization. All urine specimens were immediately refrigerated or processed.

Urinalysis and cultures were performed by regular laboratory personnel. Pyuria was considered significant if more than five white blood cells per high-power field were seen in centrifuged urine. The presence of bacteria was also noted. Clean-caught cultures with colony counts of pathogens of at least 100,000/ml of voided urine were considered positive. Less than 100,000/ml of voided urine constituted an indeterminate culture.

Since bladder urine is normally sterile, any growth of over 1000/ml of a pathogen in urine

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obtained by catheterization was considered significant. False-positive cultures by contamination during catheterization are possible; however, the colony count is generally less than 1000/ml.^{2, 6, 7} All colony counts in these catheterized urine specimens showing any growth were greater than 1000/ml.

RESULTS AND DISCUSSION

Results of the cultures of voided urine specimens are shown in Table 1. Seventy-nine cultures of voided urine were indeterminate, with less than 10^5 colonies/ml; 65 showed no growth on the paired catheterized specimens. This would support the contention that less than 10^5 organisms/ml of voided urine can still represent contamination. Of these 79 women, 31 had bacteriuria and 28 pyuria upon microscopic examination of the voided urine sediment.

A total of 21 patients had positive cultures of catheterized urine, seven showing bacteriuria and two pyuria. (Table 2) The seven patients with positive clean-catch cultures also had positive catheterized cultures, but 14 women had positive catheterized cultures with indeterminate clean-catch cultures.

According to the criteria used for this report, no "indeterminate" cultures were obtained with catheterization.

In this study, the incidence of bacteriuria determined by culture was 21% by catheterized samples and 7% by clean-catch samples. Rates of bacteriuria reported in the literature have ranged from 6% to 24% in various populations of women.^{1, 9-11}

Midstream clean-catch urine collection is standard practice in this community for detec-

tion of infection in female patients. Popularized in the 1950's as an alternative to instrumentation, this method has become firmly entrenched and generally accepted as reliable and reproducible. Gleason,³ however, has dramatically recorded some of the technical difficulties of such collection in "The Case Against the Clean-Catch." Only 14 of our 100 patients were able to obtain a sterile voided specimen, although 79% of the catheterized urine sample cultures were sterile. Stamey⁹ reported that only 2% of the women were able to void sterile urine, although in studies with highly cooperative patients and nursing assistants, sometimes using special devices, up to 87% of the patients obtained sterile urine.^{1, 4, 6}

State of hydration, antibiotic usage, delay in culturing the sample, refrigeration and many other variables affect the results of urine culture.^{3, 9, 12} Some have shown falsely low counts due to the type of skin cleanser used; others have shown more reliable results with no skin preparation at all.^{1, 4, 9}

Urethral catheterization to obtain urine for culture has been criticized because of possible contamination during insertion and resultant false-positive cultures. Guze and Beeson¹³ reported a 33% incidence of contamination, but counts of less than 1000 organisms/ml have generally been indicative of contamination only. Lemieux⁶ reported sterile cultures in all patients catheterized, demonstrating that reliable samples are possible. The positive cultures obtained by catheterization in our series contained more than 1000 colonies/ml of urine.

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RESULTS OF STUDIES OF 100 VOIDED AND 100 CATHETERIZED SPECIMENS

TABLE 1
VOIDED URINE SPECIMENS

CULTURES		Microscopic	
		Bacteria	Pyuria
Positive	7	6	2
Indeterminate	79	31	28
Negative	14	8	3

TABLE 2
CATHETERIZED URINE SPECIMENS

CULTURES		Microscopic	
		Bacteria	Pyuria
Positive	21	7	2
Negative	79	21	14

The arbitrary requirement for significance of 10^5 bacteria/ml of voided urine is open to question. Kass's original assertion¹⁰ has been substantiated by others that the finding of a colony count greater than 10^5 on two consecutive cultures of voided urine gives a 95% probability of urinary infection.^{10, 14} Stamey⁹ reported that 33% of patients with urinary infections had less than 100,000 organisms/ml of urine obtained by suprapubic aspiration. Gower and Roberts⁵ reported that 48% of their patients with bacteriuria proven by suprapubic aspiration did not have a greater than 10^5 colony count on two consecutive cultures of voided urine. Kass,^{10, 15} Stamey,⁹ Gleason,⁴ and others have concluded that even 1000 colonies/ml of urine may be consistent with true infection. In our study, 14 women had bacteriuria in their catheterized specimens, but indeterminate counts in their voided urine, indicating that these voided cultures were, in fact, significant.

The unreliability of pyuria alone as an indicator of infection has been reported previously. Kass found only one-third to one-half of his patients with true bacteriuria had more than five white blood cells per high-power field in centrifuged urine.¹⁰

SUMMARY AND CONCLUSIONS

In this study, we evaluated cultures and microscopic studies on clean-caught urine specimens and matching catheterized specimens from 100 women using routine hospital procedures. Clean-catch midstream urine cultures yielding greater than 10^5 organisms/ml of urine were associated with true bacteriuria as confirmed by catheterized specimens, but disregarding counts of less than 10^5 organisms in clean-catch midstream urines would have caused 14 women with true bacteriuria to go undetected.

Pyuria alone was not a reliable indicator of infection. Fourteen patients had pyuria on their catheterized samples, but negative cultures. Only two of twenty-one patients with positive catheterized cultures had a significant

pyuria, while two of seven patients with positive clean-catch cultures had pyuria.

The microscopic study as part of the routine urinalysis revealed bacteria in only seven of those twenty-one patients with positive cultures of catheterized specimens, but there were twenty-one reports of bacteria seen when the cultures were negative.

SUMMARY

Flexibility is advised rather than rigid adherence to specific colony counts for determining an infectin in clean-catch specimens compared to cultures of catheterized specimens.

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Oklahoma High School Football Injury Study: A Preliminary Report

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Prevention of injury as a result of secondary school athletic competition is the goal of every physician in this state. An injury study is the first step in approaching prevention by understanding the scope and circumstances of the problem as coaches.

INTRODUCTION

In Oklahoma prior to 1975 no information was available on the natural history of football injuries at the high school level. In other states, rules, coaching techniques and the availability of medical coverage for football have been modified based following the analysis of information reported in injury studies.²⁻⁷ Our study was undertaken to provide information to coaches and physicians concerning the extent and nature of football injuries in Oklahoma high schools. This preliminary report represents the data collected during the first two seasons of an ongoing study of five years.

MATERIAL AND METHODS

An injury was defined as any trauma which resulted in an altered or lost practice session or game. A major injury was one in which seven consecutive days practice time were lost or participation in one game was missed. A minor injury was one in which the time lost was less than seven days and no game was missed. The injury rate was the number of injuries per number of participants and is expressed as injuries per one hundred participants. Reinjury was an altered practice or time loss due to recurrence of the same problem within fourteen days.

A Class 4A football conference, the Mid-State League, was chosen to be studied. There are seven senior high schools in this league and their varsity football teams were the base for this study. Team rosters were used to determine that 903 players were at risk during the two seasons. Information concerning the injuries of a team were gathered from a designated member of the coaching staff on a weekly basis. Those players injured were then contacted by telephone to determine the details of the injury. Specific questions were asked relative to the nature of the injury, anatomic part injured, history of previous injuries, timing of the injury, activity at the time of injury, amount of time lost and physician contact.

RESULTS

The total injuries for the two years, 1975 and 1976, were 241 in the population at risk of 903.

TABLE I
INJURIES BY TYPE

SPRAIN	96
STRAIN	53
CONTUSION	44
FRACTURE & DISLOCATION	31
OTHER	17
TOTAL	241

There were 106 major injuries and 135 minor injuries. The injury rate was 25.6/100 participants. The total number of players injured was 188 representing 21% of the total participants. There were 40 players (4%) who sustained multiple injuries accounting for 76 (32%) of the 241 injuries. Of these 40 players, 32 were considered starters. Twenty players (2%) were lost for an entire season. In addition, eleven players with reinjury are not represented by the reported injury rate.

When injury was related to games and practice it was noted that 134 injuries (56%) occurred in practice and 107 injuries (44%) occurred in games. If we assume games account for 1/6 of the total time at risk, then games are much more dangerous than practice. This can be expressed in another way by considering the number of injuries/player/hour exposure. This ratio for games is 0.51, for preseason practice 0.15 and for inseason practice 0.028. The risk of injury is three times greater in games than preseason practice and twenty times greater than in inseason practice. Preseason practice is five times more dangerous than inseason practice. These findings are significant by chi square test ($p < .01$). Classifying injuries according to the quarter of the games in which they occurred or by half of practice in which they occurred did not reveal any statistically significant differences.

The 96 sprains were the most frequent injury sustained accounting for 40 percent of the total injuries when classified by type. (Table I) Se-

vere injury such as fracture and dislocation or third degree sprains were uncommon. When injuries were classified by anatomic region 144 injuries (60%) were of the lower extremity, forty-seven (20%) of the upper extremity, and 25 (10%) of the spine. One hundred two injuries were of the knee and ankle. In the upper extremity the hand was most frequently injured (9%). The spinal injuries included no fatalities or paralysis. (Table II)

Most injuries occurred as a result of contact with the player in motion. Tackling or being tackled was the most frequent source of contact. Interestingly, 54 injuries occurred while running in an open field. The majority of these injuries were to the lower extremity. There were 20 injuries of the ankle and 13 injuries of the knee.

Injuries by position revealed that the offensive backs and linebackers sustained the most injuries, 65 (27%) and 54 (22%) respectively while the offensive linemen 38 (16%) had a relatively safe position. The frequency in offensive backs and defensive linebackers was more than expected by chance and the offensive linemen less than expected by chance by chi square test ($p < .01$).

Physician care was rendered for 172 injuries (71%). There were 13 injuries requiring surgery and eleven of these were injuries of the knee. All 13 of these players were lost for the season. A disturbing factor was that ten major injuries did not receive any professional medical care. In spite of time loss greater than seven days none of these injuries were evaluated by a physician. In addition, 11 players had one or more recurrences of the same injury.

DISCUSSION

Injury studies of this kind have been done in many states across the country.²⁻⁷ This study is the preliminary report of an attempt to compile injury statistics from football in the State of Oklahoma. The injury rate reported is 0.256

TABLE II
INJURIES BY ANATOMIC AREA

Upper Extremity		Lower Extremity		Back		Other	
Hand & Fingers	21	Foot	4	Low Back	13	Head	2
Wrist	3	Ankle	49	Neck	12	Visceral &	
Elbow	6	Knee	53			Systemic	23
Arm	1	Thigh	9				
Shoulder	16	Hip	29				
Total	47		144		25		25 241

and is of little importance in relation to other studies because of variability in the definition of injury, the reporting methods and the experience of those tabulating results. The importance of this figure is how it varies from year to year within this study and the causes for this variability. Our opinions may change as time goes on but for now the following seem to be valid observations from this study.

High school football in Oklahoma seems to carry no greater risk than other daily activities since it has been reported that the expected injury rate from any cause for children in elementary and high school is 0.246.^{1, 8, 10} Nevertheless, football is an activity whose risks can be controlled and therefore our efforts should be directed towards lowering our 0.256 injury rate.

A significant number of the injuries in this study occurred in games. Therefore, it seems reasonable that every game should have some type of trained medical coverage. This has not been a problem in the Mid-State League, perhaps because of its urban setting, but there are coaches in the state who have difficulty finding a physician to do pre-participation physicals much less attend at a game. There is no rule mandating such coverage by any responsible body in the state. Other states (notably Texas and Massachusetts) have programs to certify members of the school faculty (other than the coaches) to perform the functions of a full-time trainer. This would be one way of providing dispassionate coverage to all athletic contests.

Although more injuries occur in games, the early season injury rate is markedly increased by the heavy emphasis on scrimmage in practice during the preseason. In addition, many players require a period of time to condition themselves because they are unprepared physically for this preseason practice. We would recommend limited contact practices in the preseason preceded by a period of four weeks of conditioning. Limited contact practice has been used in the past in North Carolina with a reduction of practice injuries. In Illinois the preseason practice has been preceded by 12 conditioning sessions spaced over four weeks. These practices involve no football in any form, but concentrate on readying the body for the actual competition. During the years this program has been used there has been a steady decrease in preseason injuries.

The players most frequently injured are

those who have the greatest exposure, the first string players. The data on multiple injuries indicates that a major portion of the injuries were sustained by this select group of players, the starters, during game competition. In addition, these players have greater motivation, are more aggressive and tend to play against better players which also increases their risk.

Sprains remain the most common type of injury, and the lower extremity is the most common site of injury. It has been suggested that looseness or tightness of joints may predispose to sprain or strain type injuries respectively. We would recommend flexibility evaluation prior to competition, followed by appropriate conditioning to stretch tight muscles or strengthen weak muscles to increase joint control. In addition, there have been changes in the rules aimed at protecting the lower extremity by limiting crack-back and below-the-waist blocking. However, these rules are effective only when strictly enforced by intelligent officials and cooperative coaches.

The positions at greatest risk are offensive back and linebacker while offensive lineman seems to be significantly safer. This difference is related again to exposure and in the case of the linebacker the personality type of the indi-

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vidual playing this position has been noted to be a more hostile one both on and off the field.¹¹

We have noted the ready access to physician coverage in the Mid-State League. Nonetheless, 29% of the injured players did not receive a physician's care. There were ten major injuries which received no professional medical care and 11 players with repeated occurrence of the same injury. Continued education and cooperation may improve this record.

We plan with the cooperation of coaches and physicians to continue our study of injuries in high school football because we feel this kind of documentation will provide a firm basis for improving safety in the future. The information from injury studies may not be transferable from state to state because of differences in abilities, coaching techniques, and local rules. This study will give Oklahoma

coaches and physicians a data base from which to work in planning the care of their teams. □

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the Oklahoma City Clinical Society and the Oklahoma Academy of Family Physicians.

Favism in Oklahoma

REPORT OF CASE

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Favism is a common disease in many parts of the world, but virtually unknown in Oklahoma. Recognition is easy if the physician is familiar with the symptoms and the population groups involved.

The reality of widespread international travel, especially by population groups from the "emerging nations," brings about the possibility of the occurrence of previous geographically contained diseases in new localities. We wish to report a recent case of favism which occurred in a Saudi Arabian child residing in Oklahoma, and comment on the peculiarities in presentation, diagnosis and management of this disorder, which to our knowledge, has not been previously reported in this area.

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An 18-month-old Saudi Arabian boy was brought to the emergency room of the Oklahoma Children's Memorial Hospital on 6-25-77 because of jaundice and pallor. His illness had begun 36 hours previously with weakness, icterus and dark colored urine. On the day of admission his parents noted anorexia, listlessness, and worsening of the icterus and pallor. Although not elicited initially, further questioning a few hours after admission revealed that the child had ingested cooked fava beans 8-to-12 hours prior to appearance of his first symptoms. The child's past medical history was otherwise unremarkable. There was a vague history of a somewhat similar, albeit milder, illness in his six-year-old male sibling two years previously, although a medical diagnosis had not been made.

Physical examination on admission revealed: Temp. 38.6°C, Pulse 170/minute, Respiration 36/minute, Blood Pressure 104/60 mmHg. The child was lethargic, pale and markedly jaundiced; there was a grade I/VI systolic ejection murmur heard over the precordium; the remainder of the physical findings were unremarkable.

Admission laboratory data were: Hemoglobin 5.2 gm/dl, Hct 15.7%, WBC 28,300 mm³, with 61% polys, 27% lymphs, 7 basophils and 5 monocytes; platelets 359,000 mm³; Zeta sedimentation rate was 73% (markedly elevated); the corrected reticulocyte count was

4.4%; sickle cell prep was negative; peripheral blood smear revealed moderate anisocytosis and poikilocytosis, slight polychromasia and schistocytosis. Coagulation studies: Patient/Control: Prothrombin Time 13.4/12.7 seconds, partial thromboplastin time 25.3/33.8 seconds, thromboplastin time 9.1/10.2 seconds, fibrinogen 225/200 mgm/dl; BUN 26 mg/dl, glucose 146 mg/dl, bilirubin T/D 16.2/1.3 mgm/dl; SGOT 110 units; Coombs test negative; the total serum proteins 6.3 gms/dl; G6PD was deficient; other RBC enzymes were within normal limits (Glutathione Reductase, DNADH Diaphorase, Pyruvate Kinase, Triose-PO₄-Isomerase).

Urinalysis showed a gross dark brown color, pH of 7.0; specific gravity of 1.011; glucose, negative; protein 2+; occult blood 3+; acetone 4+; microscopically rare RBC's and occasional granular casts.

The child's clinical course during the first three days was characterized by continued fever, vomiting, jaundice and hemoglobinuria. He continued to manifest a hemolytic anemia, requiring transfusions of packed RBC's, as well as leukocytosis, thrombocytopenia and azotemia. Despite continued severe anemia, his reticulocyte count did not respond significantly until the fifth hospital day, at which time his platelet count also began to rise. (Fig 1) By the sixth hospital day he was asymptomatic, and he was discharged on the seventh hospital day. Studies of the blood of the patient, his sibling and parents revealed that all manifested glucose-6-phosphate dehydrogenase (G6PD) deficiency. (Table 1) The boy has remained well during subsequent follow-up visits in the outpatient department.

DISCUSSION

G6PD deficiency is among the most common

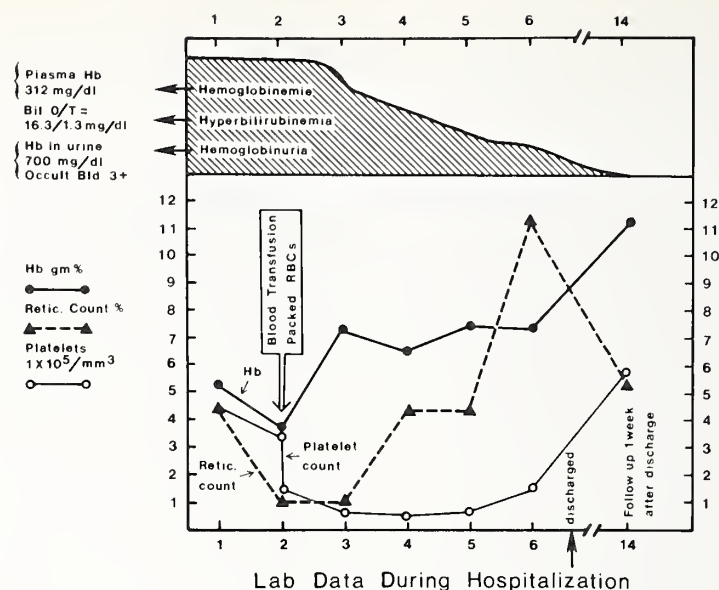


Fig 1

of the inborn errors of metabolism. Several million males throughout the world are enzyme deficient. There are also about one-and-a-half to twice as many heterozygote females. The defect is transmitted in a sex-linked co-dominant manner; several dozen mutants of G6PD have been described. The normal enzyme, also called Gd^B, is the common type and represents the standard of normal activity. Two different mutant enzymes called, Gd^{A-} and Gd^{mediterranean} occur with enough frequency to have clinical importance. Gd^{A-} deficiency occurs in approximately 10% of Afro-American males; Gd^{mediterranean} deficiency occurs in 10-30% of the mediterranean people.^{1, 2, 3}

In the steady state, G6PD deficiency is clinically silent, but is manifested as a hemolytic anemia with variable severity after exposure to hemolytic agents. There are several important clinical differences between the hemolytic crisis which occurs in patients with Gd^{A-} and Gd^{mediterranean} variants. In Gd^{mediterranean} the deficiency of RBC enzyme is more severe (activity 0-5%), the onset of hemolysis occurs sooner after exposure to the hemolytic agent (3-24 hours) than with Gd^{A-} deficiency (24-36 hours); and hemoglobinuria and anuria are more constant. The anemia is more severe in

TABLE 1
RBC ENZYME STUDIES

TESTS	RESULTS				NORMAL VALUES
	PATIENT	FATHER	MOTHER	BROTHER	
G6PD-Screening	Deficient	Deficient	Deficient	Deficient	
G6PD-Quant	66 Units/ Billion RBC's				140-280 unit/ billion cells
		0.8 I.U./gm Hb at 30°C	0.4 I.U./gm Hb at 30°C	0.48 I.U./gm Hb at 30°C	5-10 I.U./gm Hb at 30°C

Gd^{mediterranean} deficiency (often Hemoglobin < 6 gm/dl) as compared to a more moderate degree of anemia in Gd^{A-} deficiency (rarely HB < 6 gm/dl). The duration of hemolysis is self limited in Gd^{A-} deficiency, whereas it is often prolonged and may be fatal in Gd^{mediterranean} deficiency.

Favism is the term used to describe the acute hemolytic crisis precipitated in patients with G6PD deficiency Gd^{mediterranean} variant who eat or are exposed to fava beans (*Vicia fava*) while it is not thought to occur with the Gd^{A-} variant deficiency. Fava beans are commonly used as a dietary staple and weanling food for children in the Middle East, North Africa and Iran.^{1, 4} Favism may occur following the first exposure to the bean or may not appear until after multiple exposures. Repeated attacks of favism are not uncommon, and familial clustering of attacks, often variable in severity, has been observed.⁵ It is generally a pediatric disease with a peak incidence between two and six years of age, but cases may occur in susceptible adults. There is a marked predisposition to affect male children, which is thought to be due to the marked differences in phenotypic expression in the heterozygote female.¹

The hemolytic agent in the fava bean has not been identified. It is thought that the toxic factor is concentrated in the skin of the bean and decreases with the age of the bean. It is known to be excreted in the milk of lactating mothers who ingest these beans.

There is a rapidly growing population of Iranians and Saudi Arabians in Oklahoma, mainly centered in Norman, Tulsa, Stillwater, Edmond and Oklahoma City where many attend college. G6PD deficiency Gd^{mediterranean} is prevalent in Iran and Saudi Arabia where as many as 10-30% of the population is at risk.^{1, 4} Of the population at risk as many as 10-20% may develop favism after ingestion of the fava bean⁴, which is now commercially available in certain Oklahoma stores. Therefore, we anticipate that this, the first recognized case in Oklahoma in a Saudi Arabian child will be followed by additional cases in our geographic area. The peculiarities in presentation, diagnosis and management warrant review of this condition, and the clinician should be alert to its possible occurrence in the above populations.

Favism is characterized by four clinical signs and symptoms: weakness or fatigue, pallor, jaundice and hemoglobinuria.³ This symptom

complex is specific enough to be recognized as a clinical entity among populations at risk to the disease, especially if a history of ingestion of fava beans can be elicited. However, the diagnosis must be confirmed by the direct or indirect demonstration of reduced G6PD activity in red cells. Laboratory findings in favism reflect the severity of the underlying G6PD deficiency, the dose and form of fava bean ingested, the age of the patient and severity of anemia. The acute episode is characterized by intravascular hemolysis: anemia with Heinz bodies and reticulocytosis accompanied by hemoglobinemia, hemoglobinuria and jaundice, features which are prominent for one to three days.³ Usually the anemia is severe, with hemoglobin values dropping below 3 gm/dl, and may be fatal if complicated by heart failure.³ Thrombocytopenia with low reticulocyte counts may occur but it is uncommon and is usually spontaneously corrected within the first week. Oliguria and anuria may occur in severe cases secondary to the hemoglobinuria; this condition may be aggravated by the

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Certified by the American Board of Pediatrics, James E. Wenzl, MD, was graduated from Creighton University School of Medicine and limits his practice to Pediatric Nephrology. He is Professor and Vice-Chairman of the Department of Pediatrics at the University of Oklahoma Health Sciences Center. Among his medical affiliations are the American Society of Pediatric Nephrology, the American Society of Nephrology, the International Society of Nephrology, the Southern Society for Pediatric Research and the Alpha Omega Alpha.

hyperkalemia associated with severe hemolysis, and death from renal failure is common if renal failure care is not available.

Successful management of patients with favism starts with early diagnosis and prompt admission to a hospital where close observation is available. Judicious use of fresh packed RBC transfusions to prevent the consequences of tissue hypoxemia and congestive heart failure is one of the cornerstones of therapy. Alkalinization of the blood aids in retarding the rise in serum potassium and may also be helpful in preventing renal shutdown. If renal failure occurs, early institution of peritoneal dialysis may be life saving.⁶

In conclusion, favism is a serious disease in the susceptible populations, mainly children of mediterranean or Iranian origin. Early clinical diagnosis is vital and prompt hospitalization and initiation of therapy is life saving. □

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- P.O. Box 26901, Oklahoma City, Oklahoma 73190.

ATTENTION COUNTY MEDICAL SOCIETIES

All resolutions from your county medical society to be presented to the OSMA House of Delegates must be in the OSMA office no later than **30** days preceding the annual meeting.

The 1978 Annual Meeting will convene May 3, 1978, hence deadline for receipt of your resolutions is **April 3, 1978**.

Address all resolutions to
OSMA,
601 N.W. Expressway,
Oklahoma City, Oklahoma 73118.

Immunization Notes

Nationally, cases of polio, diphtheria, pertussis, tetanus, measles, mumps, and rubella continue to be reported, at times in appalling numbers, even though there are presently safe and effective vaccines against these diseases. In Oklahoma, the major problems are with measles (67) and rubella (38) cases reported since July 1, 1977. Measles vaccine was licensed in 1963 and, at that time, recommended for children 9 months to 9 years of age. By 1966, it was found children immunized prior to their first birthday were inadequately protected. Thus, the recommendation was changed to children 12 months and older **only** should receive measles vaccine and that all children immunized prior to their first birthday should be re-immunized.

Rubella continues to be a problem, because thousands of children are not being immunized until the School Immunization Law forces them to be protected.

Apathy is the primary reason children are



News From The Oklahoma State Department of Health

not being protected against the childhood diseases at an early age. Parents are certainly at fault in not maintaining records and thus, a systematic schedule for the immunization of their children. However, they alone are not the total problem. All too frequently health care providers, both public and private, are apathetic in record reviews and notification of parents of their children's immunization needs.

If these diseases are to be eradicated it is vitally important that a concerted effort be made to identify those children unimmunized or inadequately immunized and to swiftly enter or re-enter them in a health care program for proper immunization. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR DECEMBER, 1977

DISEASE	December 1977	December 1976	November 1977	Total To Date	
				1977	1976
Amebiasis	2	1	—	22	14
Brucellosis	—	—	—	3	7
Chickenpox	107	126	23	1071	1823
Encephalitis, Infectious	13	5	2	13	26
Gonorrhea (Use Form ODH-228)	1258	1012	1320	13473	13268
Hepatitis, A, B, Unspecified	61	96	92	805	1317
Leptospirosis	1	1	2	3	2
Malaria	—	—	—	—	3
Meningococcal Infections	1	4	1	16	26
Meningitis, Aseptic	6	5	11	82	38
Mumps	48	100	28	600	912
Rabies in Animals	15	18	8	242	183
Rheumatic Fever	—	1	—	3	14
Rocky Mountain Spotted Fever	5	—	4	75	92
Rubella	5	5	—	38	81
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	—	5	4	67	306
Salmonellosis	15	12	19	322	262
Shigellosis	18	11	11	91	182
Syphilis, Infectious (Use Form ODH-228)	14	4	6	92	100
Tetanus	—	—	—	—	—
Tuberculosis, New Active	25	31	13	296	384
Tularemia	1	1	—	11	11
Typhoid Fever	—	—	1	2	1
Whooping Cough	—	3	1	16	26

OKLAHOMANS QUEUE UP — STUDY BRITAIN'S NHS

by
Richard L. Hess
OSMA Associate Director

During November, 1977, 58 Oklahoma physicians had the unique opportunity to tour first hand London and England's National Health Service. After the week was over and the group had "queued up" more times than most Oklahomans would like to imagine, they found things in England and with the National Health Service pretty much as they expected. The people were delightful and quite hospitable. The pubs were warm, fun filled, although the taste for bitters is acquired; the Thames, although dirty, was a slow-moving, romantic river; the predominant color in London was gray, although it seldom rained, it threatened constantly; and as expected, nearly 600,000 Britishers were queued up waiting for medical or surgical services of one sort or another.

For many of the 150 doctors, wives and families who attended this one-of-a-kind tour, it must have seemed like they would never arrive. Long hours aboard a plane made them impatient, and the anticipation of seeing London along with its Tower Bridge and the many other historical sites as well as the thought of visiting first hand with English doctors, nurses and hospital administrators made the flight seem even longer than it actually was. Before the week was up and the long trip home was made, however, nearly every doctor who had taken part expressed his satisfaction with the tour and seminar as well as his gratitude that he had been one of those who was able to attend. Many left Oklahoma City's Will Rogers



An early morning boat ride down the Thames welcomed the OSMA tour and introduced us to London.

Airport the evening of their return suggesting that future seminars be held in Canada, France or perhaps even Australia.

A number of factors contributed to the outstanding week-long meeting, but the most important was the objective, in-depth program which had been arranged. Not only did Oklahoma doctors have the opportunity to tour both private and NHS run hospitals in London, they also had a question and answer session with members of the Birmingham Health Authority and toured the hospital and other facilities at the Oxford Area Health Authority. Add to that speakers such as the president of the Royal College of General Practice, a deputy ombudsman of the National Health Service, the medical director of a private hospital in London, the

president of the Royal College of Surgeons, as well as several other well-known National Health Service authorities, and it is easy to understand why the OSMA seminar was so successful.

The first day in London was left open, giving us the opportunity to recover from the long, overnight flight. After landing at London's Gatwick Airport we loaded ourselves onto buses which eventually dropped us off at a public dock on the Thames River. Strangely enough, the English have little trouble with their driving, although the roads are built for left-handed drivers and are interrupted by frequent English "roundabouts."

Once on the Thames a leisurely ride on the Barracuda was in store, which took us past many old English historical sites . . . St. Paul's Episcopal Cathedral, London's City Hall, the new London Bridge, the new theatre center, plus old riverside warfs which had seen better days. Visible, too, were ruins still left standing from World War II.

Once we landed it was a short walk and bus ride from the river's edge past the old London Tower to our headquarters for the week-long program . . . the Tower Hotel. Tour guides were quick to point out that beefeaters still guard the Crown Jewels, which are kept in the Tower . . . the execution place of many Englishmen.

The remainder of the first afternoon was spent recovering. Although tour guides always insist that you stay awake, many could not help but ignore their warning. Later that evening a reception at the old Charles Dicken's Inn kicked off the official program and gave Oklahomans a taste of the warm English hospitality they would experience over the next six days. The Charles Dicken's Inn, where Charles Dickens spent much of his free time writing and thinking about the people of England, gave Oklahomans a taste for the authenticity of London and provided insight into the people and the health system they had come to study.

Most of those who had heeded the warnings to stay awake left early; those who had not stayed later, and many left to investigate London's night life. All, however, looked forward to the next morning when the actual program would begin and they would hear from the likes of Sir George Godber, Dr Donald Irvine, Dr Peter Lord, and Mr. Goffrey Weston.

The next morning a near capacity group of doctors and spouses were on hand to hear the



Sir George Godber (L), OSMA President, Dr C. S. Lewis, Jr. (C), and Dr Donald Irvine (R), compare notes prior to the first morning's program.

distinguished group of English physicians and NHS administrators. David McCurdy, who is a former assistant attorney general of Oklahoma and who is currently studying international economics at the University of Edinburgh, was unable to be present that morning, so OSMA President Dr C. S. Lewis, Jr., made the introductory remarks and provided a brief historical review of the NHS. With this one exception, the morning's program came off without a hitch.

Sir George Godber defended the National Health Service, describing the 1948 change-over from health insurance to a health service as "a moment when we stopped mainly paying for services at the time of use and instead paid for them through taxes." He said nobody gets health service for free and described the English system as one in which the decision was made to pay through taxes.

He said the decision not to base the British system on insurance as is the case in France, Germany and Netherlands, was the single most important point about the 1948 reorganization.

To call this system socialistic, said Sir George, "seems rather odd to us . . ."

"In fact, the first bill for a National Health Service was drawn up, though it wasn't published, for Mr. Churchill's conservative caretaker government just before the Labor Party victory in the summer of 1945."

Sir George said that under the 1948 reorganization private practice was still allowed in England, although it proved to be a very minor part of health care there. He said 98 percent of



Sir George Godber provided a detailed description of the development of England's National Health Service.

the citizens have chosen the NHS over private health care. (Editor's Note: A British citizen must pay into the National Health Service even if he chooses not to receive his health care through the NHS.)

Sir George credited the National Health Service with solving many of the maldistribution problems in England without disrupting patient care. "Everything changed on the 5th of July, 1948, only in the source of payment and the machinery of local administrators. Patients didn't notice any change at all. They simply went to the same place for whatever care they had had previously."

Sir George described the 1948 legislation as general enabling legislation rather than the specific laws which are handed down in the United States. He said English lawmakers generally allow modification by regulation as well as a great deal of freedom for local initiative. He seemed to be telling Oklahoma doctors that the National Health Service had grown and evolved to meet the needs of British citizens in a manner which would not be possible in the United States.

"Your law tends to impose rather narrow restrictions upon the executive, because on the whole the legislature doesn't always trust the

executive, so it legislates much more frequently, at much shorter intervals and in much greater detail."

Sir George admitted that there were waiting lists or queues in England but denied that they were as serious as we Oklahoma tourists seemed to feel. He said one in five might wait as long as six months, but more than three-quarters of all NHS patients have their operations within three months, and most much quicker than that.

He did admit, however, that many women wait more than six months for gynecological operations, and an even greater percentage of orthopedic patients must wait long months for their operation.

"Now, if you are restricted to very painful movement or even to a wheel chair for lack of a hip joint replacement, six months is an awful long time to wait."

Even with a system which requires no payment at the time of service, Sir George said his figures showed that England spent far less of its gross national product on health care than did the United States. According to Sir George, 5.8 percent of the English GNP goes for health care compared to 8.6 percent in the United States. He said all other Western European countries with the exception of Ireland spend substantially more of their GNP on health care than does England. What Sir George seemed to be telling us was that the National Health Service fit in well in England but would not work in the United States. He pointed to the huge rebuilding which was required as a result of the Second World War as the reason few new hospitals had been built, and his comments about our health care system in the United States seemed to say that we were unstructured and unorganized. He said Hill-Burton funds had enabled the United States to build many new hospitals, but he said many of them were in the wrong places.

A standard charge for all medications regardless of their expense did not bother Sir George, nor did the fact that family doctors do not have hospital privileges and have up to 4,000 patients on their list.

The bottom line for most Oklahoma doctors came when Sir George answered his own question as to whether or not a National Health Service would work in the United States.

"I don't believe myself that our pattern of health care is one appropriate to the United States for lots of reasons."

He said a basic feature of the British system is that all hospitals are owned by the government . . . a system which would be unpalatable to most presidential candidates and unacceptable to most Americans.

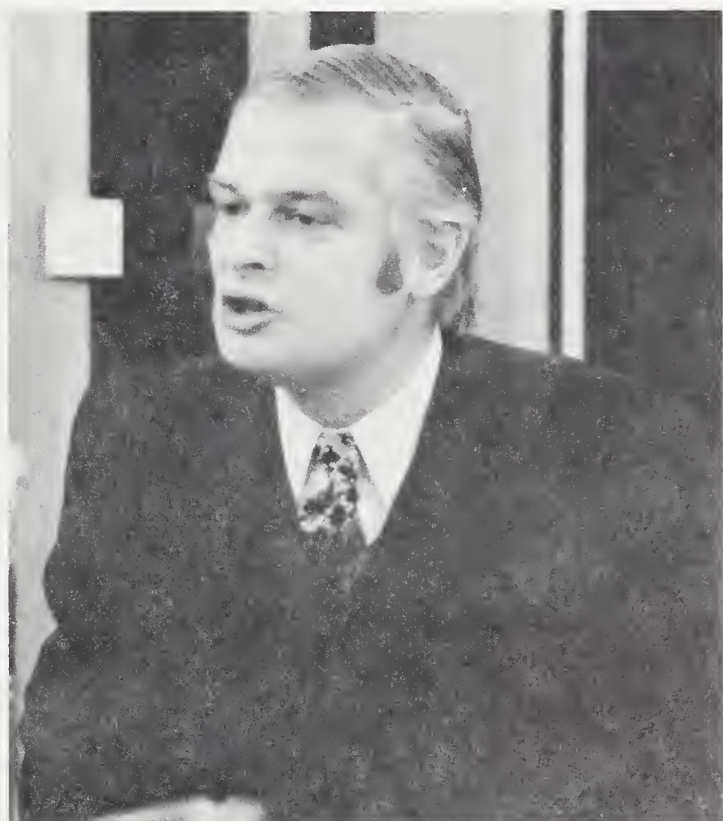
The president of the Royal College of General Practice, Dr Donald H. Irvine, brought Thanksgiving greetings and said it was his intent to talk about patients, doctors and emerging medical disciplines in England.

Dr Irvine pointed to the advent of the National Health Service as the birthdate of modern general practice in England. He said prior to 1948 general practice physicians were "do it all yourself doctors" who managed everything from making medicines to running the office.

"This system of care seemed to many to be highly inappropriate . . ." He said it led to severe criticism of general practice.

He pointed to the formation of the Royal College of General Practice as the principal step which improved general practice care in England, and he said it was this organization that "set standards in general practice where none had existed."

Although general practice in England performed a so-called metamorphosis about the time the National Health Service was organized, Dr Irvine said the NHS "had in fact kept funds for general practice short." He said



Dr Irvine said the NHS was the birthplace of modern general practice in England, but also said long lines and NHS bureaucracy were major problems.

eventually doctors had to take government to court over this.

Dr Irvine said an agreement was eventually worked out which made group general practice more viable than it had been under previous arrangements and brought an end to the "do it all yourself" doctor. The new agreement brought supporting payments so doctors could employ the staff they needed, and commercial loans were made available to doctors so they could invest in the equipment which is necessary in a general practice setting.

Dr Irvine spoke of general practice in an evolving manner. He described the holistic approach it takes in England and spoke of changes in education and in philosophy. He said a new National Health Service Vocational Training Act will require that after 1981 all general practitioners first have a period of specialist training. He described this as training which is based on the patterns of morbidity, the kinds of illnesses patients suffer, etc, which have been determined by general practice studies. He also described the different approach to home care which many English doctors share.

While Dr Irvine described the evolution of English general practice mainly in positive terms, he said it is not without its problems. He said the standards of general practice vary too widely, there are still inadequate resources provided by the National Health Service, and he said the attitude of some doctors is not conducive to the changes which are necessary.

Basically, though, said Dr Irvine, morale among doctors in the National Health Service is high. In his closing remarks, Dr Irvine answered the question many of the Oklahoma physicians certainly wanted to ask.

"I am not a salaried doctor though I receive my fees from the government. I receive my fees in three ways, partly as a capitation fee, partly in the form of basic allowances, which is a valuable method of incentive to improve general practice, and partly in the form of items of service. I cherish my freedom but I subscribe to the values of the National Health Service nevertheless."

Perhaps even more valuable than the regular program was a half-hour question and answer session which took place following the presentations by Sir George Godber and Dr Irvine. It was during this period that we had our first opportunity to ask the questions which are common about the National Health Ser-

vice. To the question of what changes would you make, particularly in reference to where the United States is heading, Dr Irvine pointed to the bureaucracy as the major problem with the NHS. He said he felt the NHS had achieved a better distribution of doctors in England than we have in the United States, and he seemed bewildered by the fact that "there were more neurosurgeons in the city of Chicago than there are in the United Kingdom." At the same time he seemed just as bewildered by a system which creates "super hierarchies of nurses and doctors who no longer do but tell others how to do, which, he said, has occurred in England."

"This," he said, "is at the root of many of the professional dissatisfactions at the moment."

To this question Sir George again demonstrated his belief in English evolutionary change.

"I think that the 1974 reorganization is too complicated. I look at it only as a stage to the next one, which I think will come after our Royal Commission and probably will be in effect by about 1985." Sir George went on to say that the separation of generalists and specialists was one of the major differences separating the US system from our British counterparts.

"It all relates to the separation of specialization in hospital work and to use of specialists

on a district rather than a single institution basis." For this reason he said health planning brought about in the US by the passage of PL-93641 in 1974 will never be able to produce the unification necessary to ration distribution of services.

When questioned about the number of hospitals and the number of beds which have been built since the 1948 reorganization, Sir George took a roundabout approach. He, in fact, discounted the importance of the question.

"Whether we build hospitals or whether we build beds is almost irrelevant."

He emphasized that England faced a monumental rebuilding program after the devastation of World War II with more than three million houses to replace or rebuild. He said England was still far behind in its development.

In all, said Sir George, approximately 30 complete new hospitals have been constructed. A just as effective manner and the method being used in England, said Sir George, is to renovate older facilities. Sir George indicated this was a much more acceptable program for England, especially considering their financial woes.

Both Sir George and Dr Irvine had answers or at least rationalizations for the 596,000 people who were on medical queues when we arrived in England. Sir George again stressed that urgent cases and suspected malignancies are almost always operated within the month. He pointed to non-essential surgery or elective surgery as the reason for the long waiting lists. In some respects Dr Irvin agreed with this analysis.

"I think the National Health Service is very good at dealing with acute emergencies. If you have a heart attack you get admitted there and then if this is necessary. And if it is admission for cancer, surgery is quick and rapid. But a lot of people suffer a lot of discomfort, and I think quite unnecessarily. Varicose veins to be stripped, cartilages to be removed or repaired, hernias to be repaired, and what we forget to say, and it is a major defect in our system, is that many of these people are off work, a charge to the taxpayer, being in discomfort . . ."

Dr Irvine also pointed to the inefficiency of the NHS bureaucratic maze. "We are relatively uncritical about the use of highly expensive inpatient resources," said Dr Irvine. He spoke of tests which are forgotten and patients who wait needlessly in bed for five days as common occurrences.



Dr Irvine and Sir George disagreed on some points but generally supported the NHS.

Eventually they both agreed that any waiting list is too long and admitted that the list had lengthened during the past three years. They both said that they hoped additional financial resources and more doctors would bring an end to this problem.

One of the more interesting questions concerned treating the patient in the home . . . a common practice in England. One of the Oklahoma doctors said he thought this was a horrible waste of time, and he asked how Dr Irvine could rationalize it.

Dr Irvine said England had the highest domiciliary visiting rate in Western Europe even though the rate had declined substantially over the last 20 years. He said he disagreed that this was an ineffective method of treating patients, and he said English physicians would be very unwilling to see it disappear completely. The largest single benefit to home visitations, he said, is the insight you gain into the patient's environment.

"The cigarettes which are lying around and the whiskey bottle tucked out of the dresser upstairs provide a lot of social information which family doctors use and find extremely valuable, especially when diagnoses are not clear."

America's tendency to put more patients in the hospitals also leads to a higher home visit rate in England, said Dr Irvine. He said in England families are willing to look after patients with quite severe illnesses.

"In my view it is unreasonable to expect someone with lobar pneumonia to go riding around."

He said most patients with acute bronchitis, left ventricular failure and patients who suffer strokes are managed at home.

"Another contributing factor are the many people who prefer to die at home," he said.

"I believe that when curing is stopped, the opportunity for it is passed, caring by doctors has not, and I consider it as still part of my job to support people right until the end."

After the question and answer session and a brief intermission, Dr Peter Lord, a general surgeon from the High Wycombe District of London appeared. Dr Lord arrived late, out of breath, and apologetic that he had fallen prey to one of London's frequent traffic jams. He nonetheless was able to provide a different perspective of the National Health Service.

Dr Lord forewarned the American audience, telling us that not all of the bad things nor



Dr Peter Lord (L) shows his apparent displeasure with the discussion of the NHS. Meanwhile, Dr Lewis and Mr. Goffrey Weston discuss Mr. Weston's part of the program.

all of the good things we had heard about the National Health Service were true. He said Americans interested in the NHS normally come in two sorts: the ones who want to hear what a terrible disaster it is, how it is crumbling and falling apart, and how people are dying due to a lack of proper equipment; and those who want to hear what a magnificent achievement it is and how it provides the finest health service in the world. In truth, he said, it is a mixture of both.

Dr Lord, who is now an outspoken critic of NHS, said that when he was a student he favored the system.

"I had no experience at working outside the National Health Service. I welcomed this. As a student I was very keen that there should be a health service. I did not know what the alternatives were."

There were several selling points which led to the NHS, he said. First, he said, we thought once you got through the backlog of hernias and ulcers, the system would actually save itself money because everyone would be working happily, there would be a lot of preventive medicine, and illness would be stopped. Second, no one would ever again have to worry whether he could afford medical treatment.

The second premise proved to be true, although the British government worries quite a lot about money. The first never occurred.

The most effective demonstration on the National Health Service seminar came when Dr Lord circulated his NHS pay slip from the previous month. As one of four general surgeons responsible for a population of 250,000 people, his salary for October, 1977, was 892 pounds, or approximately \$1,500; his take home was 483 pounds or less than \$1,000. Considering England's cost of living, the fact that he spends a minimum of 30 hours a week in surgery or at bedside, the fact that four vasectomies a day five days a week would bring a larger paycheck, and the fact that all consultants (specialists) are paid at the same rate, it is not difficult to understand why Dr Lord has become a critic of the system.

How then do Dr Lord and others manage in England's high-priced economy . . . The private patient.

"I rely on my private practice for the bulk of my income, and I do my private practice on Saturday and Friday when I keep my health service commitments to a minimum. About one patient in five is a private patient."

Although most patients have confidence in the system, many would prefer to see the physician of his choice.

Dr Lord said if a patient contacts him for medical treatment outside the National Health Service, he treats him exclusively from that minute on and the patient sees no general staff. If he sees him within the National Health Service, he must understand that the surgery will not be performed by a particular, designated surgeon.

Before becoming a consultant surgeon Dr Lord said he spent 16 years in a subsidiary position as a poorly-paid general hospital doctor. He began his surgical career at age 23, worked in 12 different hospitals and for 29 different consultants before he finally received his appointment. The long road to a consultant's position has both its drawbacks and its benefits, said Dr Lord.

Because of the limited number of consultants, the time he can spend with each patient is extremely limited. This same system, however, tends to insure that only the most highly qualified doctors are appointed to consultant positions.

The quality of the health personnel, the clinical independence, and the freedom from financial worries (for the patient) make up the posi-



The excellent week-long program kept participants interested and prompted suggestions that future seminars be held in France, Canada and even Australia.

tive aspects of the National Health Service. The shortage of physicians, the shortage of equipment, the low pay, the waiting lists, and the lack of mobility make up some of the negative aspects.

Only Dr Lord mentioned the mobility factor, but he did so in a vivid manner.

He described repeated attempts to be appointed to a consultant's position in Manchester, his wife's hometown, attempts which were repeatedly turned down. Unlike the United States, Dr Lord cannot simply move to Manchester unless he wishes to give up his practice. To many Oklahoma doctors this was the most distasteful aspect of medicine as it is practiced under the NHS.

Though a critic of the National Health Service, Dr Lord pointed out its strong points and spoke of its development as if it were logical.

Although it was created in 1948, said Dr Lord, it was planned during World War II and was based on health services which were available nearly ten years previous.

"We had old men who stayed on in the war in order to hold the fort while the young men went to fight, and we had young men coming back with no vested interests, many of them with no jobs, and they accepted the health service. They accepted it completely. It was traumatic, but it was possible."

He predicted changes for the NHS, especially in the face of Britain's financial problems. But he also predicted that it would survive him.

As far as the United States, said Dr Lord, it would be impossible to impose such a system here for the very reasons that it was possible in England.

The times are different now as are the people.

The last speaker that first morning in London was Goffrey Weston, deputy ombudsman for the National Health Service. It is Weston's job, as well as the other men and women in his department, to receive, investigate and resolve the approximately 14,000 complaints which are received from the 51 million NHS patients each year. Of the 14,000, approximately 600 of the more difficult cases filter their way up past health service authority to the Health Service Commissioner.

According to Weston the commissioner's duty is clearly described by law . . . he must investigate any legitimate complaint which he receives in writing and which falls within his jurisdiction. Excluded are those for which a year has already passed, those which have not yet been reviewed by health authorities, those which involve clinical judgment, and those which involve the actions of family doctors.

Weston reiterated Dr Lord's statement that English doctors have absolute clinical freedom; family practitioners, who serve under contract with family practitioner committees, are reviewed by such committees and not by the health commissioner.

Even with the exclusions, said Weston, the health commissioner has a great deal of latitude in what he can do. He can investigate any alleged failure in the service provided by health authorities, he can investigate any alleged failure by one of the health authorities to provide a service which the law calls for, and he may also investigate any complaint which is made by a person who sustained injustice or hardship due to failure of service or maladministration.

The main prerequisite, said Weston, is that the complaint is made by a person who has been personally grieved and who has sustained injustice or hardship.

Weston said the department has complete authority to demand all relevant documents as well as medical notes in resolving complaints, but since their purpose is to represent both patients and the health service both parties have an equal opportunity to provide information. He said although the department has no executive powers and cannot require the health authority to implement their recommendations, only on rare occasions have their recommendations been denied. Even in those instances, he said, there are ways to resolve the problem.



Dr Lewis and English nurses at London's Wellington Hospital.

Weston's remarks concluded the morning's program, a very successful beginning for the OSMA National Health Service Seminar. After lunch with our new British friends the program continued with a 45-minute bus ride across the heart of London to England's only totally private hospital, the Wellington Hospital. The Wellington has strong American ties, being managed by the US based Humana Corporation and provides a different view of British medicine.

Bill Heburn, an administrator for the hospital, surprised us with his distinct American accent and gave a brief history of the development of the Wellington. He said he and the Humana Corporation had been involved in the private practice of medicine in London for about a year and a half, having purchased 49 percent of ownership in March of '76 and the remainder in March of '77.

What has been done at the Wellington, said Heburn, is that we have molded American techniques with British tradition and have come up with a new concept in health care delivery. He said the Wellington delivers the type of health care the English people have asked for.

As far as patients, said Heburn, "The people that we market to are the same people that hospitals market to in the states. They market to patients and they market to physicians. The physicians that we market to are the leading consultants in London."

He said patients from all walks of life come to the Wellington. Former patients include Elizabeth Taylor, Eva Gardner, Jean Hack-

man, as well as many people from the Arab nations. In fact, he said, 40 percent of our business comes from foreign embassys.

He said the success that the Wellington has experienced has come for three basic reasons. One, the technology is good. Two, the Wellington has very good nursing and technical staffs as well as fine equipment. And three, the image and reputation.

Dr Arthur Levine, medical director and founder of the Wellington Hospital, described how the Wellington was built while a Labor government was in power, and how potential problems eventually helped solidify the Wellington's position. Soon after opening the hospital in 1974, said Dr Levine, Barbara Castle, who was then minister of health, decided to attempt to do away with the private beds in National Health Service hospitals and thus do away with private medicine in England. The effect, he said, was to enundate the Wellington with prominent English surgeons and to spread its reputation.

Dr Levine said the second factor that helped the Wellington was the strike of hospital per-

sonnel. Soon after the Wellington was completed the National Union of Public Employees, which encompasses most hospital employees, went on strike and managed to close most of the hospitals, he said. They did not, however, close the Wellington.

As a result of these two factors, said Dr Levine, the Wellington received a great deal of attention, was besieged by calls from the media, and managed to become associated with many of the most prominent English doctors.

Since that time, he said, we have been 95 percent full.

Doctor Levine described London as a huge metropolis with a population of 10 to 12 million and as a great medical complex.

"We have 11 medical schools. Many of them are well-known. We have the royal colleges: we have the Royal College of Physicians, the Royal College of Surgeons; the Royal Colleges of Psychiatry, Radiology and others."

London's hospitals, he said, go back in history as far as 1200 A.D. He described the voluntary hospital system in some detail, saying formerly those who could afford to pay for treatment paid, and those who couldn't afford to pay didn't. He said the system was quite



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competitive, and it was difficult to get a staff position, even though physicians received very poor honorariums for their service. Dr Levine described the system prior to 1948 as a system in which private practice flourished, but not at the expense of the teaching/voluntary hospitals. But, he said, the reorganization which occurred nearly 30 years ago changed all that.

In 1948, he said, "I went to a meeting of the British Medical Association . . . and 98 percent of the people got up and waved their papers and said we shall never, never join the National Health Service."

He said, however, two months later 98 percent of the doctors had indeed joined up.

What was offered to English doctors, he said, was a system by which they could receive payment for the voluntary work they had previously done for next to nothing while they still maintained their private practice.

"All the doctors who had worked in the volunteer hospitals were sent letters by the government department saying that they could continue working, that they would receive a salary and they could be part time or full time as they desired."

As far as the NHS budget is concerned, his description resembled what has already happened in the United States. He said the people were told the National Health Service would cost 500 million pounds per year. The current budget he said, is 3,500 million pounds per year.

As the medical director of a private hospital and a doctor who has never joined the National Health Service, you may be interested in what he sees as the future for private practice in England. According to Dr Levine, it is quite good.

Although he says the NHS hospitals are good, the long waiting lists, as much as four to five years for hip operations, are causing private practice to increase in England. He says current estimates show approximately 2,250,000 people are privately insured through one health insurance program or another, plus he said there has been a rapid expansion of foreign (private) patients over the last few years.

"Private practice is alive and well in this country and is going to stay."

His warning to Americans: If you do not think clearly about what the politician wants, what the public wants and what the medical

profession wants and can give, the cunning, shrewd politicians will win.

After Dr Levine's remarks, we toured the patient rooms as well as the operating theaters of the Wellington Hospital. What we found was a well-equipped, well-staffed and apparently well-run private hospital. Unfortunately the type of medical care which is delivered at the Wellington is not available to most English citizens.

Then came another bus ride across town and a visit with Dr Reginald S. Murley, president of the Royal College of Surgeons, plus a tour of the college as well as the fascinating John Hunter Surgical Museum.

Then it was back on the buses for another ride through intriguing downtown London and back to the hotel. For most of us it had been a long day but fascinating. What we had learned from the people we had spoken with in just one day had made the trip worthwhile.

Editor's Note: To be continued in next month's Journal. □

Building Project on Again

The Board of Trustees has given its go ahead to a proposal to build a new 3,900 square feet structure to house the Oklahoma Foundation for Peer Review. The proposal was first approved by the Board of Trustees in November but was temporarily halted because it was uncertain if PSRO's would be funded next year. The climate in Washington, D.C. is now more favorable, and the Board of Trustees again gave the project its support provided a formal lease is negotiated with the OFPR.

In other action the Trustees considered the Oral Roberts University City of Faith proposal and voted to take the same position as the Tulsa County Medical Society. Tulsa County polled its members on the issue and received the following results. Six hundred forty-five ballots were mailed, and 488 were returned. Of this, 378 or 78 percent expressed opposition to the City of Faith, and 106 or 22 percent expressed support. Four persons abstained.

At the Board of Trustees instructions, these results were distributed to the Health Planning Council and to the media.

Dr Scott Hendren, Dr M. Joe Crosthwait and Dr Orange M. Welborn, all AMA delegates or alternate delegates, reported on the AMA interim meeting in Chicago. Dr Hendren said he felt the overall philosophical position of the AMA House of Delegates was conservative, but

he also said a new program by which specialty societies have representation in the House of Delegates would tend to make it more liberal.

Dr Crosthwait reported that the AMA has apparently decided to put more emphasis on its public relations program, having increased the budget from \$700,000 per year to something in the neighborhood of \$1,500,000.

In other action the Board of Trustees also:

*Received the Report of the President, in which Dr C. S. Lewis, Jr. reported on a recent visit to Washington, D.C. He told the Trustees he and David Bickham visited with Senator Bellmon and Representatives Jones, Steed, Edwards, Risenhoover and Florida Representative, Paul Rogers. Dr Lewis also reported on the progress of the Oklahoma Utilization Review System and the Physician Manpower Training Commission.

*Received the report of the Secretary-Treasurer. Dr Start said the treasurer's report showed a small profit to date, but he warned the Board that the last few months of each fiscal year are the most expensive. He told the Board that it should expect a deficit in fiscal year 1977-78. As a part of this report OSMA Executive Director David Bickham reported a record high 2,987 paid and pending members.

*Referred an Executive Committee recommendation that a dues increase of up to \$30 be implemented to the Council on Planning and Development. Dr Start told the Board the additional revenues would be used to offset increased operating expenses, expenses expected for the continuing medical education program, and additional expenses related to the OSMA legislative program. In referring the item to the Council on Planning and Development, the Board instructed that each Council be notified to prepare a budget based on current dues and a dues increase of \$30.

*Approved the continued support of the American Medical Student Association, Oklahoma Chapter. The AMSA president and treasurer gave a brief report on the Oklahoma Chapter's activities, and presented a budget proposal for the AMSA national convention to be held in Atlanta. The Board voted to contribute \$1,000 toward the student's expenses, which is in keeping with standing OSMA policies.

*Received a report from the Council on

Members Services on the OSMA-sponsored professional liability insurance program.

*Received a report on two new OSMA staff positions. Janice Collins has been hired as the new OSMA receptionist, and the former receptionist, Marilyn Housley, has undertaken the underwriting duties as well as the membership duties. Candidates are currently being interviewed for a communications assistant to assist in the OSMA's public relations activities.

*Received a report indicating that the Beckham County Medical Society unanimously endorses Dr William M. Leebron as a candidate for OSMA president-elect.

*Nominated Dr Hillard Denyer, Bartlesville, for the A. H. Robbins Award, and W. K. Warren, Tulsa, for the Distinguished Service Award for Outstanding Layman.

*Endorsed the candidacy of Dr Jack B. Nettles, Tulsa, for a position on the AMA's Council on Medical Education and endorsed the candidacy of Dr Ed L. Calhoon, Beaver, for a position on the AMA's Council on Legislation. □

LOCUM TENENS

Attention physicians interested in part-time or vacation relief work.

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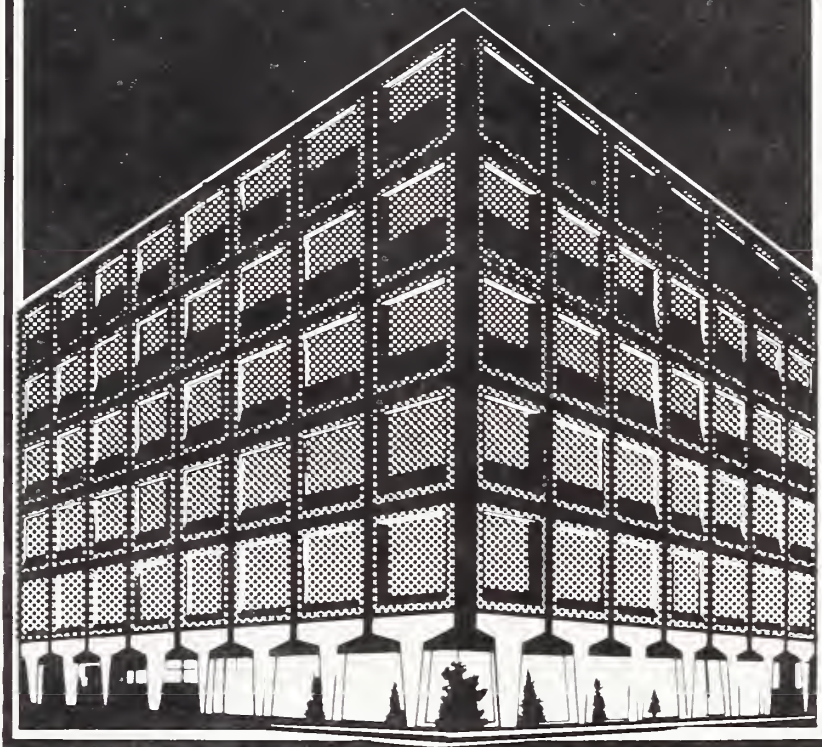
CORRECTION

Correction to Lachman, E., *Anatomia Animata: Visceral Reflexes*, *The Journal of the Oklahoma State Medical Association*, Vol. 71: Feb. 1978, page 44.

Once urine has entered the proximal part of the urethra, reflux action will bring about contraction of the detrusor and relaxation of the internal sphincter.

Once urine has entered the proximal part of the urethra, reflex action will bring about contraction of the detrusor and relaxation of the internal sphincter.

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Legal Briefs

Many physicians feel that a "mistake" in diagnosis or treatment in and of itself equates with negligence on the part of the physician. A case in point is the radiologist who misses the hairline fracture on an x-ray which another radiologist later diagnosis.

The missed diagnosis, in the eyes of the law, does not constitute professional negligence, if the physician has used reasonable skill and care in making the diagnosis commensurate with other practitioners in the same field.

In Oklahoma, our courts early on addressed this issue. In 1906, the Supreme Court of Oklahoma rendered its decision in *Champion v. Kieth*. Therein, the Court stated that:

"A physician or surgeon is never considered as warranting a cure, unless under special contract for that purpose. His contract as implied by law is that he possesses that reasonable degree of learning, skill and experience which is ordinarily possessed by others of his profession, that he will use reasonable and ordinary care and diligence in the treatment of the case which he undertakes, and that he will use his best judgment in all cases of doubt as to the proper course of treatment. He is not responsible for damages for want of success, unless it is shown to be the result of want of ordinary skill and learning, such as ordinarily possessed by others of his profession, or for want of ordinary care and attention. He is not presumed to engage for extraordinary skill or for extraordinary diligence or care, nor can he be made responsible in damages for errors in judgment, or mere mistakes in matters of reasonable doubt or uncertainty."

The mistaken diagnosis, therefore, does not constitute malpractice unless and until others similarly situated using due care would not have missed the fracture.

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DEATHS

JOHN G. MATT, MD
1911-1978

John G. Matt, MD, a former member of the Editorial Board of *The Journal of the Oklahoma State Medical Association*, died in Tulsa, January 10, 1978. Dr Matt, 66, had practiced in Barnsdall for the past seven years, following 26 years of practice as a proctologist in Tulsa. Born in Jefferson City, Missouri, he was graduated from the University of Tennessee College of Medicine in 1935. His accomplishments in medicine and research on the use of a new drug were widely recognized throughout the medical profession. His medical affiliations included the International College of Surgeons, the Southwestern Surgical Congress, and the American Proctologic Society.

WALTER S. LARRABEE, MD
1885-1978

Retired, radiologist, Walter S. Larrabee, MD, 92, died January 13, 1978. A native of North Dakota, Dr Larrabee was graduated from the University of Louisville School of Medicine in 1910. He practiced in Texas and Mississippi before moving to Tulsa in 1926. He had served as President of the Tulsa County Medical Society and was named by that group as Tulsa's Doctor of the Year in 1970. He was a member of the American College of Radiology and had been presented a Life Membership in the Oklahoma State Medical Association.

JAMES P. JOBE, MD
1924-1978

El Reno physician, James P. Jobe, MD, 53, died January 23, 1978. Born in Muskogee, Oklahoma, Doctor Jobe was graduated from the University of Oklahoma College of Medicine in 1951. His practice was established in El Reno the following year. Doctor Jobe served with Dr Albert Schweitzer in Africa in 1963 and later was a medical missionary in Bolivia. He also served with the Medical Corps during World War II. □

Doctor Leebron Urged As President-elect



Dr William M. Leebron, Elk City, has received the unanimous endorsement of the Beckham County Medical Society as a candidate for president-elect of the Oklahoma State

Medical Association. Dr Leebron, who is a former vice-president of the OSMA and currently the chairman of the Council on Medical Services, will be nominated for the position at the annual meeting in May.

A letter of support to all OSMA officers, delegates, trustees and alternate trustees was mailed from Dr William M. Featherston, president of the Beckham County Medical Society. The letter pointed out that Dr Leebron had the unanimous endorsement of the Beckham County Medical Society and that he was qualified for the position by virtue of the positions he has held in organized medicine.

In addition to being vice-president of the OSMA and a council chairman, Dr Leebron is also a past-president of the Beckham County Medical Society, a trustee for the Oklahoma Foundation for Peer Review, a fellow of the American College of Surgeons, a fellow of the American Society of Abdominal Surgery, a fellow and president of the International Academy of Proctology, and a sub-area council member of the Health Systems Agency of Oklahoma. Dr Leebron is married to Charlotte Speer Leebron, who is a past-president of the auxiliary to the Oklahoma State Medical Association. ☐

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Physicians Not Protected Under Worker's Compensation

Editor's Note: According to a recent ruling, physicians are no longer protected from professional liability proceedings in worker's compensation cases. The following article was prepared by John Wiggins, LLB, a professional liability defense attorney with the firm of Short, Barnes, Wiggins and Margo. This law firm handles the defense for many of the professional liability cases in Oklahoma City. His comments relate to the case of German v. Greer, which was a test case that changed a previous ruling which had exempted physicians from professional liability proceedings in worker's compensation cases.

Elba German sustained a work-related injury to his heart that ultimately necessitated open heart surgery. Mr. German subsequently filed a Workmen's Compensation claim in due course settled it by Joint Petition for \$22,040.00. This was a settlement of all claims against his employer and its insurance carrier for medical aid and compensation for temporary disability, permanent disability, permanent disfigurement, and loss of wage earning capacity which he now or may hereafter have as a result of his injury. Further, the \$22,040.00 settlement was agreed to be in addition to those reasonable and necessary medical expenses already incurred by Mr. German prior to the settlement.

After negotiating his settlement, Mr. German then filed a civil damage suit against the physician who performed his open heart surgery and the hospital where it was performed alleging negligent conduct on the part of both. Both the physician and the hospital filed Motions for Summary Judgment, contending that Mr. German was barred from suing them because he had already collected under the Workmen's Compensation Act, which was his exclusive remedy. These positions were sustained by the Trial Court which ruled that any injury suffered by Mr. German in connection with his medical treatment was merged into the workmen's compensation award. Mr. German appealed.

On appeal, the physician primarily relied on two cases from the Oklahoma Supreme Court, *Markley v. White*, 168 Okl. 244, 32 P.2d 716 (1934) and *Alexander v. Von Wedel*, 169 Okl.

218, 37 P. 2d 252 (1934). In both cases, the plaintiff was an injured worker who secured workmen's compensation and additionally brought a malpractice action against a treating physician selected by the employer. In both cases the Supreme Court held that an award under the Workmen's Compensation Act is in part based on the pain and suffering of the employee and that this included any subsequent malpractice by a treating physician that the employer selected. This meant that the jurisdiction of the Industrial Court was exclusive and the employee could not file a civil suit against the physician. There were some narrow exceptions allowed, such as when an employer failed to pay the compensation or it was alleged that the subsequent malpractice was the result of malicious or intentional conduct. Since neither of these exceptions applied in Mr. German's case, the physician urged the Court to follow the pre-existing law and affirm the Trial Court's decision.

On appeal, Mr. German heavily relied upon the Oklahoma Supreme Court case of *Hull v. Wolfe*, 393 P.2d 491 (Okl. 1964). This was a case where an injured employee obtained a Court approved settlement under the Kansas Workmen's Compensation Act and also brought a malpractice claim against an Oklahoma physician whom he, the employee, had selected. In this case, the Court held that the acceptance of this settlement in Kansas did not operate as a release of the Oklahoma doctor who had been selected by the employee without the employer's authorization because the Oklahoma physician was in no manner a party to any settlement between the employee and his employer for injuries related to the employment.

The physician in Mr. German's case sought to distinguish *Hull v. Wolfe* by arguing that in that case the employee had selected his own physician and the Supreme Court expressly stated in *Hull* that:

"... the attending physician was not furnished by the employer, but was selected independently by plaintiff. Thus, cases which involve aggravation of injury by negligence of the employer's doctor are inapplicable."

The physician urged that Mr. German's case was one in which the services of the physician were provided and paid for by the employer and therefore he, the physician, was entitled to the benefit of Mr. German's settlement which

included a settlement of present and future pain and suffering.

In a nutshell, the Supreme Court ruled in favor of the plaintiff and remanded the proceedings back to the District Court, holding:

"Absent bona fide employer-employee relationship for performing medical services, a common law action for malpractice will lie against a negligent party notwithstanding the injured employee may have a right to recover for such injuries under the Workmen's Compensation Act, 85 O.S. 1971 44.

Selection of a physician or hospital by the employer or payment or charges for such services by the employer does not create an employer-employee relationship so as to extend the employer's immunity from suits at common law for negligence to those furnishing medical services."

Markley v. White . . . and Alexander v. Von Wedel . . . are hereby overruled insofar as the same are in conflict with the principles herein expressed; and *Hull v. Wolfe . . .* insofar as it is in conflict with the views expressed herein, is disapproved."

The reasoning of the Court was that an independent physician is not really a stranger to the Workmen's Compensation Act who does not share in its burdens (ie, payment of insurance premiums) and thus should not be entitled to its benefits (ie, immunity from suit). Further, the liability of an employer in workmen's compensation is based on the idea of an employment relationship between employer and employee while the liability of a physician for malpractice is predicated on the idea of fault.

The opinion of the Court further states:

". . . acceptance of a settlement under workmen's compensation should never be a bar to a suit against the physician *who was not a party to the settlement.*" (Emphasis added.)

Any chance of double recovery to the employee who collects both workmen's compensation and a civil reward against a physician is solved by allowing the employer or its insurance carrier the right of subrogation for that amount of the civil reward that represents monies it paid pursuant to the Workmen's Compensation Act.

It should be noted that there are two ex-

ceptions in the Court's opinion that in certain instances allow the physician to remain insulated from a civil suit. First, if a physician is a true "company doctor" and genuinely works for the employer as opposed to engaging in private practice and seeing injured employees of a particular company, he remains cloaked with immunity. Second, if a physician is a party to the settlement between the employer and employee, he arguably remains free from civil liability. Since the vast majority of physicians are not "company doctors," it is this second exception that should be given some thought.

In an effort to minimize the possibility of civil liability to an injured worker the physician treats for an employer, it might be well to have an agreement with the employer (if possible in writing and containing a hold harmless clause) the Joint Petition settlements will not be had until after treatment is completed and then the physician will expressly be included in the release papers and, if a case is not settled and results in an Industrial Court award and subsequent civil suit against the physician, the employer will hold the treating physician harmless.

It is agreed that at first blush neither of these agreements would seem too attractive to an employer but it could be argued by the physician that he is wanting no more than he had prior to the decision of *German v. Greer* and the employer should view the providing of this to the physician as a cost of doing business to ultimately be passed on to the consumer just as he views compensation insurance premiums as a cost of doing business. Further, obtaining the employer's agreement to include the physician in any settlement release would seem relatively easier than obtaining an agreement from the employer to hold the physician harmless in the event a compensation case is not settled and the employee subsequently sues the physician. In short, half of a good thing is better than nothing at all. □

Health Planning Guidelines Severely Criticized

A letter severely critical of new national guidelines for health planning has been drafted by Dr Perry Lambird, chairman, Council on Governmental Activities, and sent to the Department of Health, Education and Welfare. The letter, which was approved by the OSMA Board of Trustees at its February 11 meeting,

criticizes the new guidelines for several reasons.

First of all Dr Lambird points out that previous comments provided by the OSMA were essentially ignored and that HEW has simply published a new set of proposals which contain "virtually all of the ills of the old." Speaking for the OSMA, Dr Lambird told HEW, "We strongly and emphatically object to the continued degraded role of Health Systems Agency in addressing the various component guidelines making up this proposal. The changes suggested on January 20, 1978, are window dressing and no more."

The guidelines include numeric ratios for hospitals which the Oklahoma Hospital Association, as well as the OSMA, feel are unrealistic for this state. It is the OSMA's contention that the ratios quoted by HEW first of all lack any documented validity, and secondly do not take into account the differences between a Manhattan Island hospital and one in rural Oklahoma.

In concluding, Dr Lambird told HEW officials, "We feel the department has continued to ignore the intent of Congress in allowing individual HSAs to adjust medical care levels in their areas of jurisdiction based upon local needs. As worded, we feel that the national guidelines are still intended to be national rules, rigidly applied, with de-certification of individual health systems agencies as a near certainty if these guidelines are not rigidly followed." □

Book Reviews

IMMUNOLOGY OF THE GUT. Ciba Foundation Symposium 46 (new series), Elsevier, Excerpta Medica, North Holland, 384 pages, 69 figures, 46 tables, New York, 1977.

Immunology of the Gut is another outstanding Ciba Symposium. The book includes presentations, and the discussions that followed them, by a number of prominent authorities in various areas of fundamental, applied and clinical gut immunology. Particular emphasis is placed on IgA. The natural history of IgA producing cells, and their precursors, their lodging in the bowel and the mechanisms

involved in secretory IgA response to antigenic stimulation, are discussed in depth.

Other topics included in the symposium include the gut antibody reactions to bacterial and food antigens, immune responses in the dental plaque, the role of mast cells and eosinophils in certain adverse immunological reactions in the bowel.

The clinical part of the symposium covered topics such as the importance of genetics and nutritional factors in the responses to antigenic stimulation, the relationships between immunodeficiency and giardia lamblia infection, the pathogenesis of alpha chain disease, inflammatory bowel disease and celiac disease.

The book compounds a collection of excellent presentations and discussions. *Ramon Torres-Pinedo, MD*

CLINICAL GASTROENTEROLOGY, second edition, Howard M. Spiro, 1,289 pages, McMillan Publishing Company, Inc., New York, 1977, price \$45.00.

This is an encyclopedic textbook covering the field of gastroenterology. It is comprehensive, up-to-date and readable.

Gastroenterology is a field which has shown significant advances in recent years. The author has carefully culled these advances and put them together in proper perspective. As in the first edition, emphasis is still heavily on clinical aspects of gastroenterology. However, in the second edition the author has paid greater attention to physiology and pathophysiology. The author admits to dogmatism in certain areas but this is well controlled.

This comprehensive, authoritative book can be recommended for all those concerned with gastroenterology. *Harris D. Riley, Jr., MD*

TEXTBOOK OF PAEDIATRIC NUTRITION, edited by Donald S. McLaren and David Burman, New York, Churchill Livingstone, 1976, \$35.00.

This textbook was written specially for teachers and postgraduate students in pediatrics and nutrition. However, it was expected that nurses, dietitians and physicians responsible for the care of sick children would find it of value.

In addition to the editors there are 21 contributors including dietitians. It is divided into four approximately equal parts on nutrition

and growth and development, nutritional disorders, nutritional aspects of other diseases and nutrition in the community. Most of the contributors have been involved in nutrition activities in third world countries, notably in Africa and the Middle East, and the sections on

nutritional disorders and community medicine reflect these experiences. The book is of interest to those with international interests. For those involved in community nutrition programs in North America, there is little here that will be helpful. *Harris D. Riley, Jr., MD* □

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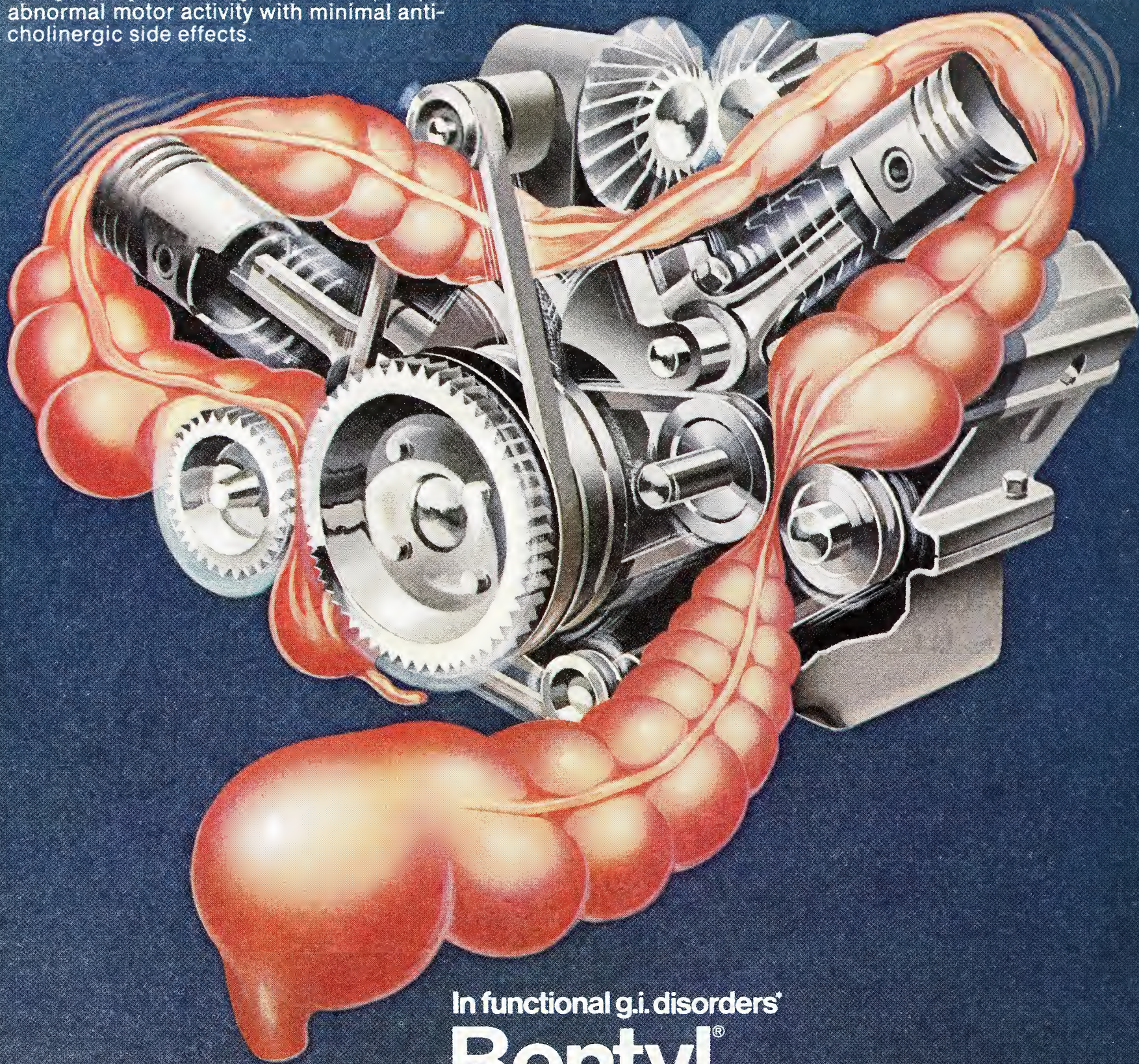
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I think this CME thing is just a terrific idea. Continuing medical education. Wow! Whoever thought up the idea of that tricky acronym—CME—is a genius. And the guys who decided to assign CME credits to certain approved get-togethers are simply brilliant. But the real wizards of this super-sell are the fellows who decided to compel themselves — and us less enlightened followers — to earn so many credits a year — or so many credits every two or three years — or *else*.

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As I understand it, those of us who practice medicine will have a whole batch of CME programs from which to choose. The brochures I've received to date offer courses in the desert in July and August, in Chicago in January and February, in the subtropics in the summer and in the Carribean during the hurricane season. We can select three-day, two-day, five-day, week-day or weekend courses of instruction. And some of them offer wonderful opportunities to combine family vacations while we earn our CME credits: We get up early — a really great vacation idea — attend classes all morning and then have the rest of the day to enjoy our families.

Of course these stimulating refresher courses aren't free but they are — probably — partially at least — I think — tax deductible. They cost from fifty to four-hundred-fifty dollars, plus the thirty to fifty dollars a day for bed and board, plus thirty to five-hundred dollars

for transportation. And all or a lot of this expense is tax deductible, along with the two-hundred to fifteen-hundred dollars it will cost you to keep your office functioning while you're gone. The two-hundred to two-thousand dollars you won't earn while you learn is not deductible but since you don't make it you don't have to pay taxes on it anyway.

You'll be seeing fewer patients and your annual expenses will be greater so you'll be forced to raise your fees but you'll be better informed, mentally and physically refreshed and therefore, more efficient — until you try to catch up with the mail, the charts, the phone calls, the bills and the insurance forms that have piled up during your absence. But don't despair — you'll be more competent — really up to date — in treating all your patients with lupus erythematosus, histoplasmosis, dermatomyositis, equine encephalitis, malignant melanoma and cancer of the stomach. You will have learned a lot about the right way to practice medicine from a lot of people who have never practiced medicine but who knew exactly what you needed to know. You didn't realize that you couldn't learn, couldn't read journals or books, couldn't increase your knowledge and competence while you were actively engaged in the practice of medicine. And you damn sure can't earn your mandatory CME credits if you're so busy taking care of patients.

I'm not really opposed to education — even continuing medical education and, I'll admit, I've exaggerated my objections to compulsory CME. But I resent being told how and when and what I am to learn. I am convinced that the only real credits I can earn will come from my patients and their welfare will be the only real measure of my competence.

I didn't mind answering roll call when I was in grade school or in the army. But then I *knew* I wasn't a free man.

MRJ

It is a gratifying and worthwhile experience to be president of this association. The responsibilities and activities, though heavy and furious, are meaningful and necessary. The problems our profession faces are many, complex, and can't be solved in one year. From the vantage point of president, I have had the opportunity to see the myriad of influences that ultimately affect the quality of the care our patients receive. Some would ignore these nonprofessional elements and attempt to isolate the physician and patient into a nonparticipatory role. Such an action, in my opinion, is tantamount to patient abandonment. These problems require professional attention, and solutions can be guided.

Health planning has been legislated, and, although it was done over our objections, planning for patient care requires physicians. To shirk our health planning responsibility would be shirking our responsibility to patients. Thus, it is vital that we continue to be represented on the Boards of the Health Systems Agency, the State Health Coordinating Council and similar organizations.

Cost containment programs require physician attention as well. Our patients perceive the cost of medical care to be high because they are told it is high. The current stampede to contain costs is potentially devastating to the health care industry and to patients. The cost of medical care can only be put into perspective by physicians; we can't permit planners to design programs without physician input.

Physicians working within the system can accomplish many things. I see fruits from the labors of past presidents: workers' compensa-



tion reform; a viable health sciences center; increased and improved physician training programs; an active and responsible Board of Medical Examiners; a changing attitude about rural practice; an effective, voluntary, utilization review system that works; and an increasing public awareness of medicine's views on health issues. It is for these and many similar reasons that it is important to have a strong medical association.

These accomplishments take time and are the result of the hard work of many volunteer physicians who believe in our association and the medical federation. Your officers, trustees, councils and committees have worked hard this past year and I proffer my sincere and heartfelt thanks. Our staff is an excellent management team which handles the many administration chores of the association in a professional and expeditious manner. They believe in the high ideals of the profession and are dedicated to their work.

In the final analysis, however, the success or failure of our efforts will depend upon our members. Your goals, your ideas, and your participation will determine the solutions proposed for tomorrow's problems. I am thankful to report that as I crisscrossed the state this year talking with many of you personally I found a deep commitment to organized medicine. I found an acute understanding of our problems and a sincere willingness to participate in the problem solving process.

Thank you for electing me to this honored and stimulating position. I urge your continued support of this proud and truly needed organization.

C. S. Lewis Jr. M.D.

Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing"

E. F. LUCKSTEAD, MD
F. B. JORDAN, MD
R. W. PROUTY, BS, DABFT

Aerosol "sniffing" continues to be a problem in the teenage drug culture resulting in sudden death without apparent warning signs or symptoms.

In the 1960's an epidemic of deaths due to "sniffing" of various types of compounds was noted. Volatile hydrocarbons were often involved. Although some cases were adjudged due to suffocation, a large number of cases had in common a more rapid death sequence. The original series was reported by Bass.¹ Subsequently, Taylor and Harris performed studies in mice which apparently related asphyxia, fluorinated hydrocarbons, and cardiac arrhythmias.² Flowers and Horan controlled PO₂, PCO₂, serum HCO₃ and pH values at normal in dogs and reported that fluorinated hydrocarbons resulted in irreversible cardiac arrhythmias.^{3, 4} The problem of sudden unex-

pected deaths of asthmatics in England, possibly related to inhalation of medicated aerosols propelled by fluorinated hydrocarbons, was reported by Dollery⁵ in a preliminary communication. Silvergate⁶ countered the articles of Taylor and Harris with other studies^{7, 8} failing to confirm the previous reports; he did concede that deliberate abuse of fluorocarbon propellants may be hazardous. The conclusion of Bass' article states: "Although total eradication of abusive sniffing is unlikely, control of this epidemic remains a major challenge to the community and the nation. To this end, a greater awareness of the solvent sniffing problem must be developed by the physician."¹

How are we doing in 1977 over a decade later? Ten documented cases in this local report resulted in death, and the total "unknown" number of "lucky" abusers strongly suggest *not very well!*

DISCUSSION

The laboratory of one of the authors, F. J., has confirmed by tissue toxicology studies ten cases of death related to fluorinated hydrocarbons (Table 1) seen in the medical examiner's office between 1973 and 1976. Nine of the ten cases were male, and represented a broad cross section of Oklahoma counties. Ages of victims

ranged from 13 to 22 years, with all but one being 18 years or younger. The pathology and toxicology were remarkably similar with halogenated hydrocarbon tissue concentrations recovered in blood, brain, and kidney of all ten cases — 6 of 10 cases in lung, and 5 of 10 cases in liver. Blood from all ten victims yielded Freon 11 and Freon 12, and one case showed Freon 11, 12 and 113 present. In three instances there was "group" sniffing by three

or more people resulting in sudden death in a single case. The other cases (7 of 10) were found by family members or non-acquaintances. Histologic and toxicologic studies for other possible causes of death were negative. None of the victims had imbibed ethanol.

In his original report Bass¹ described a brief interval prior to death in eight "eye witness" cases where the person sniffing ran, as if in a panic, collapsed, and apparently was in immediate cardiac arrest. In contrast, our three

TABLE 1

CASE #	RACE	SEX	AGE	KNOWN CLINICAL HISTORY	PATHOLOGY	TOXICOLOGY
1	W	M	17	Three juveniles sniffing "PAM" in an auto; collapsed abruptly; DOA hospital.	Pulmonary edema and congestion; visceral congestion; epicardial petechiae.	Freon 11 & 12 in blood, brain, lung, kidney; negative blood alcohol.
2	W	M	17	Inhaled "Arrid Deodorant" in a plastic bag with two other juveniles. Refilled the bag several times; suddenly gasped, turned white, collapsed, with Cheyne-Stokes respiration for several minutes. DOA	Pulmonary congestion and edema; visceral congestion; epicardial petechiae; fluid blood.	Freon 11 & 12 in blood, brain, kidney; negative blood alcohol.
3	W	M	16	Found floating in a small boat; head and shoulders in the water; "PAM" found near the body.	Changes of drowning Pulmonary edema; visceral congestion; fluid blood; petechiae of pleura, glottis, conjunctiva.	Freon 11 & 12 in blood, brain, lung (found in kidney 1-18-74) "PAM"—propellant identified as Freon 11 & 12.
4	W	M	18	Laborer with history of alcoholism and drug abuse. Found dead in trailer with plastic bags, "PAM", and commercial oven spray cleaner.	Pulmonary congestion and edema; visceral congestion; pleural petechiae	Freon 11 & 12 in blood, brain, kidney, lung; negative for alcohol and barbiturates.
5	W	M	14	DOA at home. Took Contac for "cold." Found by father slumped over the bed with vomitus on the bed. "No Apparatus."	Acute tracheobronchitis; terminal aspiration; visceral congestion; pulmonary edema.	Freon 11 in blood, brain, liver kidney, lung; negative screen for alcohol and common drugs of abuse.
6	W	M	13	Found moribund at home by his father. DOA Altus AFB Hospital. Decedent in a chair with an "aerosol" can in his lap.	Pulmonary edema and congestion; visceral congestion.	Freon 11 & 12 in blood, brain, kidney; negative blood alcohol.
7	W	F	13	With friends in auto; had been sniffing "PAM" direct for about 11 hrs.; each sniff from "seconds to minutes;" sudden respiration difficulty with micturition, unconsciousness and apparently rapid death.	Pulmonary congestion and focal atelectasis; visceral congestion.	Freon 11 & 12 in blood, brain, kidney, liver, lung.
8	W	M	14	Collapsed and died in rest room of motel where his father worked. Can of "PAM" and a bread wrapper were in the trash. Police attempted resuscitation without results.	Pulmonary edema and congestion; visceral congestion; terminal aspiration.	Freon 11 & 12 in blood, brain, liver, kidney; negative alcohol.
9	W	M	17	Found dead in his car by a passerby. A can of "Right Guard" and a cardboard toilet paper roll were on the seat. History of drug abuse.	Pulmonary congestion and edema; visceral congestion; cerebral edema; tracheal hyperemia.	Freon 11 & 12 in blood, brain kidney, liver, lung; negative blood alcohol.
10	W	M	22	T.V. service man found dead in the rest room of his shop. "Blue Stuff" found nearby.	Pulmonary edema; pulmonary, visceral, and cerebral congestion; agonal aspiration.	Freon 11, 12 & 113 in blood, brain, kidney, liver. Screen negative for common drugs of abuse. "Blue Stuff" (Tech spray, Amarillo)—Freon 11, 12 & 113.

eye witness cases were all in enclosed areas and reportedly had *no warning* of impending doom or death. This latter observation was also suggested by the dog studies of Flowers and Horan,^{3,4} since half of their animals died following aerosol inhalation despite adequate oxygenation, ventilation having been instituted with the onset of cardiac rate slowing.

It is obvious from the past experiences with

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aerosol-induced arrhythmias and/or deaths, that prevention by education of the public, physicians, and particularly adolescents is a major problem which has not yet been solved.

Currently, considerable legislation has been proposed because of the "tenuous" status of the earth's ozone layer. Freon reacts with ozone producing chlorine atoms which cause a depletion of the ozone molecule. This depleted ozone layer significantly interferes with the natural protective ultraviolet light screen which we now enjoy. Even if the halogenated hydrocarbon aerosols are prohibited by legislation, the problem of "sniffing" arrhythmias and deaths will not necessarily be alleviated. Nonhalogenated hydrocarbons in use today with propellants such as propane and isobutane have been shown to produce similar cardiac sensitization.⁹ Graphic educational demonstration of the dangers of such products should be presented to our younger population through the schools and media to avert such senseless tragedies. □

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Emergency Medicine — An Emerging Specialty

ROBERT J. WILDER, MD

With one fourth of our population suffering accidental injuries each year, and with the use of the emergency facility as the family doctor, emergency medicine has become an academic specialty that is here to stay.

Emergency medicine as an academic specialty developed because of two pressing problems with which the hospital-based physician was faced. The first problem was the continuing increase in traumatic injuries and inadequate initial care supplied in the emergency room. The second problem was the massive nationwide increase in emergency room visits beginning in the early 1960's, when the emergency room became a family doctor for many people.

The initial care supplied in emergency rooms in the past was provided by specialists who thought they could collectively provide the service needed, but none of whom remained in the emergency facility. In fact, in the 1940's and '50's, the emergency room was manned by the intern and the recent medical school graduate with consultation provided by the

specialists. In 1955, Dr Kennedy said, "The weakest spot in the whole system of care of accidents is in that uncertain period of time between arrival in the institution and definitive care in the operating room. We must accept more responsibility for what goes on in this twilight period, sometimes lasting several hours, if we hope to diminish the shocking rate of death."

There are 50,000,000 accidental injuries each year; 11,000,000 disabling injuries and 118,000 deaths, requiring 22,000,000 hospital-bed-days a year; more than all heart patients or obstetrical patients and four times the number required by cancer patients. A recent study in Philadelphia emphasized the problem. Of 950 deaths from injuries reviewed, all but two of 51 salvageable cases died because of errors made at the hospital. These errors involved diagnosis, failure to maintain adequate volume, and failure to provide specialized care early enough. Avoiding such errors requires emphasis on clinical priorities and methodical assessment of bodily damage.

At the same time, the emergency rooms were crowded with ill patients who could not find or afford a private physician. Inner cities, where fees were hard to collect and where crime was high, were left without physician coverage. Emergency room visits rose as much as 500% in ten years. Governmental guidelines, regulations, and legal actions by patients began to demand that hospital emergency rooms be staffed by licensed physicians, and these

physicians be responsible for rendered care. Boards of trustees soon recognized their responsibilities.

As a result, there has developed a demand in hundreds of large and small hospitals for full-time, licensed, physicians trained to work in emergency facilities. Medical students themselves in the 1960's became more concerned with underprivileged and deprived patients. They met them in emergency rooms and thus became more interested in clinical emergency medicine and in the emergency medical systems.

In 1970, the AMA granted approval to the Medical College of Pennsylvania to develop the country's first internship in acute care. As a result, a two-year residency program was developed to provide a total of three-years' experience in emergency medicine. Since 1970, approximately thirty-five programs in

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emergency medicine have developed in the United States and Canada. Two professional societies are firmly established — the American College of Emergency Physicians and the University Association for Emergency Medical Services. An American Board of Emergency Medicine is incorporated and is attempting to become a specialty board with certification rights for individuals in emergency medicine. Advertisement columns in various journals have long lists of job openings. At first, the job openings were for the physician interested in emergency medicine, and now they are for physicians interested and trained in a residency program in emergency medicine.

Today the area of emergency medicine encompasses not only the hospital phase, but also the prehospital phase. The emergency physician is much concerned with providing easy access into the health care system (telephone 911), with developing public education (cardiopulmonary resuscitation), with developing ambulance standards, and with providing training programs. The emergency physician also provides good care in the emergency facility, with life-threatening situations taking priority, and with the use of methodical techniques in order to avoid oversights. Finally, he mobilizes and coordinates the specialists for the various areas of their expertise. Research, both clinical and basic, has made its appearance in emergency medicine. This new specialty is here to stay. Its destiny awaits the future. □

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A Case For A Positive Public Relations Program in Hospitals

HARRY M. DELIERE, DrPH
WALLACE N. BOYD, MPH

The modern hospital as a societal institution, is confronted with perplexing problems, increased demand, and an avalanche of criticism. To overcome these difficulties, the hospital must initiate its own public relations program to "tell its story" to its publics and thereby gain their support.

INTRODUCTION

In recent years the idea has surfaced among the American public that good health is a right — not a privilege and that every American is entitled to the same level of quality medical care. This philosophy has in turn resulted in increased demands upon health professionals and health care institutions.

Faced with the challenge of meeting rising demands and expectations from a public that is often misinformed and sometimes hostile, the modern hospital must be sensitive to its changing environment and be willing to respond to

the total health needs of the community. Consequently, the voluntary system of hospitals in the United States must kindle positive public relations.

Many hospitals can be credited with having strong community relations programs, but legitimate criticisms can be directed toward the relationship between hospitals in general and their communities. While numerous factors have contributed to this situation, the ultimate responsibility must be assumed by the hospital. The modern hospital's evolution has been haphazard and sporadic; public input concerning design of facilities, services, and programs has been limited or non-existent. Individual institutions have been traditionally slow to adapt to changes in society. The general attitude of hospital governing boards has been mostly apathetic to community involvement. The philosophy that consumers have no vested interest concerning hospital services affecting them has prevailed until recently.

To improve its public image, the hospital must take the initiative and become more involved with the whole community and cultivate public support through a positive public relations program.

The goal of this program should be to communicate "the hospital's story" to its "commu-

ity" in a way that is accurate, comprehensible, and effective in creating greater public awareness and understanding of the services, procedures, quality and quantity of care the hospital offers.

Admittedly, the hospital, in attempting to implement its program, may find itself competing with other special interest groups for the public's attention. It should therefore plan to use all available resources to reach the community. Detailed planning and continuous evaluation by sincere and dedicated people advocating a consumer-patient centered philosophy must be developed to ensure that the program is competitive and successful.

MAJOR PROBLEM AREAS

Historically, a hospital's public relations program has consisted of defending itself against criticisms rather than launching its own information dissemination program. This trend has changed somewhat in recent years but the modern hospital still receives more complaints than accolades. The criticisms are numerous and varied; volumes have been written on this subject. Some of the most commonly recurring criticisms are:

1. Drab appearance;
2. Clinical atmosphere;
3. Noisy rooms;
4. Strict hospital regimentation;
5. Insensitive hospital employees;
6. Unresponsive nursing staff;
7. Demand for pre-payment;
8. Crowded clinics;
9. Depersonalization;
10. Rising costs.

The hospital also has other problems. The very nature of its existence creates negative feelings on the part of those who use its services. The patient is a reluctant consumer — he must be ill to use the service. He resents being ill and he also resents the fact that he usually cannot choose the hospital which will administer his care but instead must select a physician who then utilizes a hospital where privileges have been granted. Upon restoration of health the patient usually wants to forget that hospital experience even under the best of conditions.

Thus, the hospital must not only concern itself with developing and maintaining a positive public relations program, it must also overcome the stigma associated with illness and providing services to the ill.

Compounding the perplexing problems which confront the hospital and its public relations program is the vast number of people directly affected and the magnitude of influence which these institutions have on society. "On an average day, you can find more people than the combined populations of Boston and Cincinnati resting in hospital beds in this country . . ."¹ Additionally, experience indicates that this year about one out of seven Americans will be admitted to hospitals as inpatients; outpatient visits, totalling in excess of 200,000,000 last year, are expected to continue to increase.²

Obviously, then, the number of people involved in the daily operation of our hospitals is impressive. When one considers the number of patients receiving hospital care (and their families), the number of people directly employed by hospitals (2,000,000 plus), and the number of employees involved in providing goods and services to hospitals, it becomes evident that the hospital's realm of influence touches almost all Americans. Furthermore, the role of the hospital may expand, further complicating positive public relations efforts.

As Anne Somers states: "The modern hospital is gradually, albeit somewhat reluctantly, becoming a community health center, whether as a part of a multi-institutional unit or a single autonomous institution."³

COSTS

The major criticism of hospitals is directed toward the costs of its services and the upward trend of these costs in recent years. An example of this trend is the adjusted patient day expense, which rose 38 percent in the three-year period between 1965 and 1968; 41.2 percent between 1968 and 1970; and 59.6 percent between 1971 and 1975.⁴

In 1975 the nation spent \$118.5 billion for health care; of this, about 40 percent or \$46.6 billion was spent directly for hospital services, an increase of 16.6 percent over 1974.⁵

Containment of this upward spiraling of costs does not appear to be very promising for the immediate future. The decade of the 1960's saw an increase in daily room charges of 279 percent, and while we are just past the midpoint of this decade, many authorities have estimated that by 1980 daily room charges will range from \$400 per day in rural hospitals to \$1,000 per day in larger urban institutions.⁶ This trend is attributed to many factors: costly technological advancements, complexity of

health care, improved quality of care, gross inefficiency and inflation. "Increased demand has been identified as a primary reason for the unusually rapid increase in expenditures."⁷

The controversy surrounding this issue of costs is a valid criticism by the public and there seems to be no workable solution to this problem. Hospital administrators accurately claim that the rising cost to consumers is the result of operating expenditures. They cite statistics indicating that in 1950 hospital operating expenses accounted for 30 percent of the expended health dollar and the 25 years following have substantially surpassed the \$30 billion mark.⁸

The area of costs is an excellent example where positive public relations can be effectively used to promote better understanding in regard to a basic issue.

DEPERSONALIZATION

The decade of the 60s ushered in a new concept of individuality that has deposited an attitude toward personal dignity unprecedented in history. Consequently, a clamor has arisen nationally for individual, personalized hospital care.

The hospital cannot remain aloof and impersonal in its care of people or its role as a community institution may be altered. "Another point that might be related to hospitals in particular is that to survive they must change their operations from isolated segmented provision of care to involvement in the community and to responding to the total health needs of the community. This includes not only where the patients come from, but also about where they are going upon discharge."⁹ Most people will not accept the indignities and clinical manner in which they are received and treated for very long. The American public demands improvement in the area of provider-patient relationships.

A classic example of this depersonalized care is the story of a young girl with a series of defects being treated in a certain municipal hospital 44 times during the first nine months of her life, but never treated by the same physician twice.¹⁰

Institutions which serve large numbers of indigent people are especially coming under heavy fire because of this type of depersonalization coupled with bureaucratic inefficiency.

In spite of the fact that the poor patient suffers most of the indignities, others, including the more well-to-do, have voiced the need for reform and are organizing to this end.

"Without any attempt at melodrama, one can safely state that hospitals in the United States today face the most serious crisis in their history. The intelligent use of public relations programs may spell the difference between continued growth and stagnation."¹¹

THE PROGRAM

Defining public or community relations in itself is not difficult; the challenge is in planning, developing, and implementing a program that will meet the needs of a particular hospital. Public relations should not be considered crafty, dishonest, boastful press agency, although the use of the press is important. Rather, public relations is a planned and continuing management function seeking to win and retain the understanding, sympathy, and support by evaluating public opinion about themselves in order to correlate their own policies and procedures to achieve more productive cooperation and more efficient fulfillment of common interests.¹² A more workable definition of public relations may be one authored by Professor Scott Cutlip of the University of Wisconsin: "Public relations is doing a good job and letting people know about it."¹³

Nevertheless, the objective of a positive public relations program should be to convince the public of the hospital's honesty, sincerity, and validity as a societal institution capable of providing quality care. This is a task that must be comprehensive in nature and include all levels of hospital personnel, from the lowest paid em-

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ployee to the governing board. All staff, medical and non-medical, and volunteer organizations should have input into the program to insure that contact with the public is complete and that there is a commitment to the program by the entire hospital. The success of this program will depend, in large part, on identifying the hospital's publics and planning to reach them with valid information.

It will be useful to adopt certain principles in the development of a program. These principles are: (1) a commitment by management to the concept of serving a public that provides its existence; (2) the expression of goals in appropriate policy; (3) the credibility of the PR office and the recognition of the importance of this management function by all levels within the hospital; and (4) sincere, honest communication to inform and cultivate understanding, good will, and support.

PLANNING

Planning is certainly one of the most important phases in instituting any program and should not be underestimated. Planning is essential to: (1) identify problems; (2) properly utilize the available resources (personnel and money, both usually in limited supply); and (3) selecting appropriate courses of action.

Because of its importance, coordination of the planning function should rest with a high level manager who has access to decision makers and a good perspective of the complete hospital operation.

The program must have the full support and dynamic leadership of the hospital's governing board. The commitment and assistance of the board will prove invaluable to the success of the program. As representatives of the community, the members of the board should recognize the need for generating favorable public opinion and have the freedom to provide input and assistance when needed.

Ideally, a full-time person should be employed to supervise this program, but usually the ultimate responsibility will fall on the hospital administrator or his assistant. In either case, the entire work load should not be shouldered by him; rather a public relations committee, with broad representation from all levels of the hospital and community, should be formed to assist in formulating policy and the final plan.

The chairperson should be at an administrative level or in a decision-making position. The

remainder of the committee should consist of representation from all levels of the hospital, ie, medical staff, nursing staff, volunteer groups, employees, and the governing board, and should also include representation from the community.

The public relations committee may begin by identifying the hospital's publics and defining the various problem areas. The publics will consist of several segments, some of whom are patients, and the residents living in the hospital's service area.

Each segment of the hospital's publics should be approached individually, using the various public relations tools. Each segment should be carefully studied; a procedure involving the collection and analysis of available information. Some excellent sources of information are:

1. Medical records
2. Utilization reports
3. Various surveys
4. Inter-hospital interviews
5. Intra-hospital interviews

Although the trend has been to collect information from surveys and interviews conducted inside the hospital, ". . . changing social conditions now are causing public relations to be viewed as a process that begins outside the institution."¹⁴ It has been stated that the hospital with its influence and economic impact on the community should better utilize the available talent in the local community to help develop quality hospital operations.¹⁵

Information can also be gleaned from interviews with terminated personnel because these exit interviews do help to assess employee attitudes about the job, the supervisors and the institution, and consequently the effectiveness of the internal program.¹⁶

These techniques should result in facts that will enable the committee to define policy and establish specific goals for a positive public relations program. The goals should not be so numerous as to spread resources too thin and result in an ineffective program; each goal should be weighed against the resources available.

The goals of the program should be kept simple and flexible, presented in easily understood terms to all of the publics concerned.¹⁷

IMPLEMENTATION

An important facet of the public relations program hinges on employee relations and

should begin at the initial interview, continue throughout his employment, and include the termination interview when the employee resigns or retires. Other facets of the program for the employee include:

1. Tours (for the employee and his family);
2. Employees' Handbook to acquaint him with policy, personnel benefits, and statement of objectives and goals;
3. Employees' Newsletter (or other periodic publications);
4. Bulletin Boards;
5. Seminars;
6. In-service Education (lectures, films, and workshops).

The informed employee can be an asset in creating favorable public opinion among patients and people outside the institution.

Likewise, the medical staff, as mentioned, should be considered as one segment of the hospital's public. The program should include features (many of those mentioned above) designed for them. Not only should they be the beneficiary of the program (as in the case of the employee) but they should also participate in establishing contact with other publics through speaker's bureaus, orientation of new staff members, lectures, and submission of articles for publication.

The unsung hero of any hospital organization is the volunteer auxiliary, but this organization can usually generate more good public relations than most other efforts. Therefore, special recognition should be given to the organization and those individuals comprising it. Additionally, the auxiliary can be used to conduct tours, serve as guest speakers for various civic groups and clubs, and generally promote good will and serve as P.R. agents.

Finally, the program should be structured to promote good relationships with the patient — the focal point of the hospital's purpose. The hospital should therefore make every effort to create a favorable impression with the patient. His visit to the hospital should be as pleasant as possible. Some hospitals are now initiating programs designed to cultivate harmonious relationships with their patients, e.g., one nurse is assigned to a patient for his entire confinement; a patient's handbook is provided; pre-admission pediatric parties are given to familiarize the child with the hospital and its personnel; pre-admission letters confirming

room reservation and registration forms to keep admission delays to a minimum are mailed; a central number for instant response to patient complaints is available; and others.

Another important public that must not be overlooked by the hospital is the press. It is essential that a good relationship be developed with the news media. Therefore, policy must be outlined concerning press relationships to avoid any embarrassment for the hospital, its staff or personnel, and especially, the patient.

BUDGET

Implementing a program to reach the hospital's publics will not be without cost. An adequate budget reflecting expenditures for salaries, travel, supplies, mailing, printing, continued education, and other necessary expenses must be developed. The size of the P.R. budget will ultimately depend upon the hospital's ability to pay and management's commitment to public relations. As stated earlier, objectives and goals must be weighed against resources to effectively plan for success.

A recent survey on hospital public relations activities revealed that 80.2 percent (4,443 hospitals) of the member hospitals appropriate less than one percent of their hospital expense budget on public relations. This compares to 8.4 percent of the drug industry budget that is spent in the area of public relations.¹⁸

It must be assumed that the failure to communicate may be a matter of failure to spend.

SUMMARY

It should be emphasized that a positive public relations program involves more than doing a "good institutional job" of providing service to the community. The various publics must be informed to appreciate the service; this requires continuous intercourse with the community rather than episodic outbursts of contact.

Further, a conscious effort must be made to anticipate community reaction to specific hospital operations and sufficient time should be spent in reviewing the areas of possible criticism and devising methods to avoid conflict. It is simply a matter of doing the proper thing at the right moment in an acceptable manner.

An intelligent coordinated effort to establish positive public relations requires definite pol-

icy and support from the board and administrative levels of the hospital. Provisions for continuous in-service training and supervision of all personnel, medical staff, volunteers, and others should be adopted, increasing awareness of the objectives of the PR program and their influence on the hospital's publics.

Identifying the various publics and planning the best means of reaching them is an integral part of the program. The hospital's different publics require various approaches and methods in communicating "the hospital's story." The success of this effort depends on the involvement and commitment of every individual associated with the hospital. Input into the planning of the program should come from both inside and outside the hospital. Continuous evaluation of the program is a must.

Positive public relations is an unceasing two-way communication process for creation of a better understanding between the hospital and its publics. □

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- Department of Health Administration, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

ANNUAL SPRING SYMPOSIA IN GYNECOLOGY AND OBSTETRICS MAY 18 AND 19, 1978

MANAGEMENT OF HIGH RISK PREGNANCIES

SHERATON-CENTURY CENTER HOTEL—One North Broadway, Oklahoma City, Oklahoma

Developed by

The Department of Gynecology and Obstetrics, Office of Continuing Medical Education for Physicians,

University of Oklahoma College of Medicine, Oklahoma City, Oklahoma

The Oklahoma State Department of Health

The 1978 Annual Spring Symposia presents an outstanding guest faculty for a two-day meeting devoted to the identification and management of high risk pregnancies. Upon completion of the course the participant should have improved skills in diagnosis and management of the more common complications of pregnancy which place the mother and fetus at high risk. The participants should also have acquired the latest information concerning new developments in the areas of fetal assessment and monitoring of high risk pregnancies. One of the Luncheon Seminars will be a panel discussion on the advantages and problems associated with regionalization of perinatal care.

A block of rooms has been reserved at the Sheraton-Century Hotel for this course. RESERVATIONS FOR ACCOMMODATIONS SHOULD BE MADE DIRECTLY BY THE REGISTRANT. This may be done by writing Sheraton-Century Center Hotel, One North Broadway, Oklahoma City, Oklahoma 73102 or you may call the toll free number 1-(800) 325-3535 (please indicate you are a registrant for the GYN-OB SYMPOSIA when calling the toll free number for reservations.)

This program has been approved for 20 cognates by the American College of Obstetrics and Gynecologists.



News From The Oklahoma State Department of Health

Weight Gain in Pregnancy

Probably no topic elicits more comment from the general public and professional staff than the amount of weight gained during a pregnancy. The pendulum has swung from the restricted weight gain of the past decades with restricted sodium to the present day information that stresses pattern of weight gain rather than total poundage.

The Maternal and Child Health Service of the Oklahoma State Department of Health feels that nutritional advice to the pregnant woman depends upon knowledge of sound nutritional principles. Although the components of optimal maternal diet have not been determined precisely, several important principles may be stated:

1. Adequate intake of protein, particularly protein from animal sources should be insured.

2. Caloric intake approximately 10 percent above non-pregnant requirements is advisable.

3. Weight gain during pregnancy should not be restricted unduly, nor should weight reduction normally be attempted. The average weight gain in normal pregnancy is 10 to 12 kg. (22 to 27 lbs.)

4. Essential nutritional elements (such as sodium) should not be restricted during normal pregnancy.

5. Dietary supplements of iron and iron-containing foods are indicated during pregnancy. Other dietary supplements, such as vitamins or additional sources, may be helpful where deficiencies in nutritional status are determined.

Nutritional advice should be continued during the puerperium. Restriction of dietary intake should not be advised during the early postpartal course nor for the lactating mother.

Policy Statement on Nutrition and Pregnancy, —
Annual College of Obstetricians and Gynecologists,
Dec. 72. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JANUARY, 1978

DISEASE	January 1978	January 1977	December 1977	Total To Date	
				1978	1977
Amebiasis	—	—	2	2	—
Brucellosis	—	—	—	1	—
Chickenpox	—	153	107	—	188
Encephalitis, Infectious	—	1	—	—	1
Gonorrhea (Use Form ODH-228)	949	1003	1258	949	1003
Hepatitis, A, B, Unspecified	26	51	61	42	73
Leptospirosis	—	—	1	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	1	—	1	2	—
Meningitis, Aseptic	4	3	1	4	3
Mumps	—	93	48	—	114
Rabies in Animals	12	19	15	16	24
Rheumatic Fever	—	—	—	—	—
Rocky Mountain Spotted Fever	—	1	5	—	1
Rubella	2	4	5	2	7
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	4	7	—	4	13
Salmonellosis	12	7	15	16	7
Shigellosis	13	3	18	14	3
Syphilis, Infectious (Use Form ODH-228)	10	9	14	9	10
Tetanus	—	—	—	—	—
Tuberculosis, New Active	15	16	25	22	29
Tularemia	—	—	2	—	—
Typhoid Fever	—	—	1	—	—
Whooping Cough	1	1	—	1	1

OKLAHOMA MEDICAL SUMMIT

UPDATE '78

The theme for this year's Oklahoma Medical Summit, a combined meeting of the Oklahoma State Medical Association, the Oklahoma City Clinical Society and the Oklahoma Academy of Family Physicians, is Update '78. Scientific updates on infectious diseases, cancer, hypertension and trauma will be given with a special sports medicine seminar, wet clinics and CPR courses rounding out the scientific program. As always, a host of social, sports and business functions will round out the activities of the four-day meeting.

This year's meeting promises to be one of the most informative and entertaining ever. In addition to the outstanding scientific program which will offer between 17-22 Category I CME credit hours, Summit will feature a series of well-known speakers. Appearing at the Wednesday evening Summit Dinner/Dance will be James H. Sammons, MD, executive vice-president of the American Medical Association. The luncheon speaker for Thursday, May 4, is Governor and Senatorial candidate David L. Boren, and the luncheon speaker for Friday, May 5, is Sam Nixon, MD, speaker of the House of Delegates of the American Academy of Family Physicians. The social side of the program will include a dixieland jazz band on Wednesday, May 3, the alumni association Dinner/Dance with Buddy Morrow and the Tony Dorsey Band on Thursday, May 4, plus a special Summit Gourmet Dinner and Inaugural Ball with Forrest Wasson and his orchestra on Friday, May 5.

The annual Summit tennis tournament will be held at The Courts, and the golf tournament for Summit participants will be held at Kickingbird Golf Course.

Update '78 presents Oklahoma physicians with an opportunity to update their medical skills and receive Category I credit, plus a special opportunity to renew acquaintances with classmates and colleagues. It promises to be the best Summit held so far, and we urge OSMA members to attend and participate. The following pages offer additional information about this year's meeting. For ticket or other information, contact Summit Headquarters, 601 Northwest Expressway, Oklahoma City, Oklahoma 73118.

MEETING DIGEST

HOTEL ACCOMMODATIONS

Co-headquarters for Oklahoma Medical Summit '78 are the Skirvin Plaza Hotel and the Sheraton-Century Center Hotel in Oklahoma City. A large number of spacious and attractive rooms has been reserved for the use of physicians attending this meeting.

All Oklahoma physicians should have received Summit hotel reservation cards from the headquarters hotels. If you did not receive a reservation form, you may contact the hotels directly or write Oklahoma Medical Summit, 601 Northwest Expressway, Oklahoma City, Oklahoma 73118, (405) 843-9571. OSMA delegates and alternates are reminded that OSMA annual meeting activities and all official OSMA functions will be conducted at the Skirvin Plaza Hotel.

SUMMIT SPEAKERS

REGISTRATION

Summit registration will be located at the Skirvin Plaza Hotel. The reservation desk will be open from 2:00 p.m. to 5:00 p.m. Wednesday, May 3; from 8:00 a.m. to 5:00 p.m. Thursday, May 4; from 8:00 a.m. to 5:00 p.m. Friday, May 5; and from 8:00 a.m. to 12:00 p.m. Saturday, May 6. Participants who pre-register may pick up their function tickets and all other information at the registration desk.

OSMA ANNUAL MEETING

The OSMA Board of Trustees will meet at 11:00 a.m. Wednesday, May 3, with the opening session of the OSMA House of Delegates scheduled for 3:00 p.m. that same day. OSMA reference committees will be staggered with beginning times at 9:00 a.m., 9:30 a.m., and 10:00 a.m. on Thursday, May 4. The closing session of the OSMA House of Delegates will begin at 2:30 p.m. Friday, May 5.

SCIENTIFIC PROGRAM

Between 17-22 hours of Category I continuing medical education credit will be available to physicians who attend Oklahoma Medical Summit '78. The theme for this year's meeting, Update '78, will be anchored by scientific updates on infectious diseases, cancer, hypertension and trauma. A special sports medicine seminar will also be held as will several wet clinic sessions. For additional information, consult the preliminary program found in this issue of *The Journal*.

Leaders from medicine and politics will be featured as Summit speakers during the May 3-6 meeting this year. Appearing at the Summit Dinner/Dance which is sponsored by the Oklahoma State Medical Association will be James H. Sammons, MD, executive vice-president of the American Medical Association. The Summit luncheon speaker for Thursday, May 4, is Governor David L. Boren, and the Summit luncheon speaker for Friday, May 5, is Sam Nixon, MD, speaker of the House of Delegates of the American Academy of Family Physicians.

SOCIAL AND SPORTS

A full program of sports activities has been arranged for Summit participants. This year the Summit tennis tournament will once again be held at The Courts, Northwest 63 and Broadway Extension. The annual Summit golf tournament will be held at Kickingbird Golf Course.

EXHIBITS

As always, a large number of exhibits will be on display at Oklahoma Medical Summit '78. The exhibit hall will be in the Skirvin Plaza Hotel, and each Summit participant is urged to visit the exhibit area. A special Pioneer Doctor's Exhibit is once again planned.

LADIES ACTIVITIES

See Auxiliary page in this *Journal*.

TELEPHONE MESSAGE

While physicians are attending Oklahoma Medical Summit '78 in Oklahoma City, emergency calls may be referred to:

405 235-2405

A courtesy message center will be maintained by Southwestern Bell Telephone throughout Oklahoma Medical Summit '78. The main message center will be located near the exhibit hall at the Skirvin Plaza Hotel.

OKLAHOMA MEDICAL SUMMIT '78

SOCIAL ACTIVITIES

Wednesday, May 3

- 6:30 p.m. Early Bird Party
7:30 p.m. Summit Dinner and Dance sponsored by the Oklahoma State Medical Association
Speakers: James H. Sammons, MD, Executive Vice-President, American Medical Association

Thursday, May 4,

- 5:30 p.m. Keg & Oyster Party
Sponsored by Marion Laboratories
7:00 p.m. Specialty Dinners and Alumni Dinner/Dance

Friday, May 5

- 6:00 p.m. Summit Reception
7:00 p.m. Summit Dinner/Dance/Presidents' Ball

BUSINESS FUNCTIONS

Wednesday, May 3

- 11:00 a.m. Board of Trustees Meeting & Lunch (OSMA)
12:00 noon Board of Directors—OAFP
3:00 p.m. OSMA House of Delegates—Opening Session

Thursday, May 4

- 7:00 a.m. Oklahoma City Clinical Society Past-Presidents' Breakfast/Meeting
8:00 a.m. Cinema '78 (Schedule of films will be posted on door)
9:00 a.m. OSMA Reference Committees
12:00 noon Summit Luncheon
Speaker: David L. Boren, Governor of Oklahoma
OSMA Inauguration of Marvin K. Margo, MD, and OCCS inauguration of Larry L. Long, MD

Friday, May 5

- 7:00 a.m. OSMA Past Presidents' Breakfast
7:00 a.m. OAFP Membership Breakfast
8:00 a.m. Cinema '78
8:30 a.m. OAFP House of Delegates Meeting
12:00 noon Summit Luncheon
Speaker: Sam Nixon, MD, Speaker, House of Delegates, American Academy of Family Physicians and OAFP Inauguration of Charles Atkins, MD
2:30 p.m. OSMA House of Delegates—Closing Session

LADIES ACTIVITIES

Wednesday, May 3

- 12:00 noon Ladies Registration Opens
1:00 p.m. OSMA Auxiliary Pre-Convention Board Meeting

Thursday, May 4

- 9:30 a.m. House of Delegates — Women's Auxiliary to OSMA
10:00 a.m. Tour of Governor's Mansion, Governor's Office, and coffee with Mrs. David L. Boren
2:00 p.m. Decorators' Showhouse

Friday, May 5

- 9:30 a.m. Oklahoma Museum of Art

SCIENTIFIC PROGRAM

Thursday, May 4

- 8:00 a.m. Registration Opens
8:30 a.m. Exhibits Open
8:30 a.m. Wet Clinic—Upper Extremity Fractures—
Phillip McCown, MD
9:30 a.m. Wet Clinic—Pediatric Dermatology—
O'Tar T. Norwood, MD
8:30 a.m. SUMMIT UPDATE
INFECTIOUS DISEASES
Moderator: Clinton Strong, MD, El Reno, Oklahoma
Introductory Remarks
(8:45 - 9:00)
Legionnaires' Disease
(9:00 - 9:30)
Sudam Osterhout, MD, PhD, Professor of Medicine, Duke University Medical School, Durham, North Carolina
Infectious Diarrhea
(9:30 - 10:00)
John Nelson, MD, Professor of Pediatrics, Section of Infectious Diseases, Southwestern Medical School, Dallas, Texas
Mycoplasma Infections and Pneumonia
(10:30 - 11:00)
Sudam Osterhout, MD, PhD
Infectious Disease Seminar
(11:00 - 12:00)
Moderator: Hal B. Vorse, MD; Sudam Osterhout, MD, PhD; John Nelson, MD; A. David Beck, MD
8:30 a.m. SUMMIT UPDATE
CANCER
Moderator: John B. Nettles, MD, Tulsa
Immunological Concepts in Malignant Disease
James W. Hampton, MD, Oklahoma City
Estrogens and Endometrial Cancer

Herbert J. Buchsbaum, MD, Professor and Director, Division of Gynecologic Oncology, The University of Iowa, Iowa City, Iowa

Question and Answer Session

Moderator: James A. Merrill, MD, Professor & Chairman, Department of Obstetrics & Gynecology, Health Sciences Center, Oklahoma City, Oklahoma

Evaluation of Colon Lesions

James M. Guernsey, MD, Professor and Chairman, Department of Surgery, University of Oklahoma, Tulsa Medical College, Tulsa, Oklahoma

Pathogenics and Diagnosis of Breast Lesions

Loren J. Humphrey, MD, Shawnee Mission, Kansas

Question and Answer Session

Moderator: James A. Merrill, MD

10:30 a.m. Wet Clinic—Examination of ENT Tract—Ronald Wright, MD

1:00 p.m. AMA Practice Management

Instructor: Karen Zuppko

1:30 p.m. Wet Clinic—CPR—William Oehlert, MD

1:30 p.m. SECTION UPDATES

INFECTION

Otitis Media

(1:30-2:00)

John Nelson, MD

Rocky Mountain Spotted Fever

(2:00-2:30)

Sudam Osterhout, MD, PhD

The Female Child With Recurrent Urinary Infection

(2:30-3:00)

A. David Beck, MD, Professor and Chairman, Division of Urology, SIU School of Medicine, Springfield, Illinois

Panel Discussion: Three Common Infections: "How to Do It" and "How Not to Do It"

(3:30-5:00)

Moderator: Clark Hyde, MD, Sudam Osterhout, MD, PhD, John Nelson, MD, A. David Beck, MD

1:30 p.m. SECTION UPDATES

CANCER

Moderator: Earl M. Bricker, Jr., MD

Management of Abnormal Pap Smears

Gordon K. Jimerson, MD, Clinical Associate Professor, Department of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma

Treatment and Follow-Up Management of Breast Lesions

Loren J. Humphrey, MD

Question and Answer Session

Moderator: James A. Merrill, MD

Management of Colon Lesions

James M. Guernsey, MD

Chemotherapy of Malignant Diseases—Uses & Abuses

James W. Hampton, MD, Oklahoma City, Oklahoma

Question and Answer Session

Moderator: James A. Merrill, MD

2:30 p.m. Wet Clinic—Radiology—Abdominal—Bob Eaton, MD

5:00 p.m. Exhibits Close

Friday, May 5

- 8:00 a.m. Registration
- 8:30 a.m. Exhibits Open
- 8:30 a.m. Wet Clinic—Lower Extremity Fractures,
Phillip McCown, MD
- 8:30 a.m. SUMMIT UPDATE
HYPERTENSION
The Workup and Management of the Hypertensive Patient
(8:30-9:30)
Walter Kirkendall, MD, Professor of Medicine University of
Texas at Houston, Houston, Texas
**Management of the Hypertensive Patient with Athero-
sclerotic and Renal Complications**
(9:30-9:45)
Galen Robbins, MD, Oklahoma City, Oklahoma
Management of Acute Hypertensive Crisis
Charles Robinson, MD, Oklahoma City, Oklahoma
Panel Discussion — Hypertension
(10:00-10:45)
PULMONARY EMBOLISM UPDATE
Current Concepts of Thrombosis and Coagulation
(11:00-12:00)
Ralph L. Nachman, MD, Professor of Medicine, Head of Hematol-
ogy, Cornell University Medical College New York, New York
The Blood Coagulation, New Developments
(12:00-12:15)
Fletcher Taylor, MD, Oklahoma City, Oklahoma
- 8:30 a.m. SUMMIT UPDATE
TRAUMA
Moderator: Robert J. Wilder, MD, Director, Emergency Medical
& Trauma Center, University Hospital and Clinics
Update of Emergency Medical Services
(8:30-9:00)
Robert J. Wilder, MD
Burns, Acute Care
(9:00-9:20)
Paul Silverstein, MD, Medical Director, Baptist Burn Center,
Oklahoma City, Oklahoma
Burns, Treatment of Wounds in the Burn Centers
(9:40-10:00)
Frank A. Clingan, MD, Professor of Surgery, University of
Oklahoma Tulsa Medical Center, Tulsa, Oklahoma
Evaluation of Blunt Abdominal Trauma
(9:40-10:00)
James M. Guernsey, MD, Professor and Chairman, Department
of Surgery, University of Oklahoma Tulsa Medical College,
Tulsa, Oklahoma
Management of Traumatic Shock
(10:30-11:15)
Robert Rutherford, MD, Professor of Surgery, University of
Colorado Medical Center, Denver, Colorado
Hyperbaric Medicine
(11:15-12:00)
George M. Hart, MD, Director of Baromedical Department,
Memorial Hospital Medical Center, Long Beach, California

- 9:30 a.m. Wet Clinic—Dermatology in the Elderly
O'Tar T. Norwood, MD
- 10:30 a.m. Wet Clinic—Neck, Shoulder & Arm Diagnosis and Treatment
Don Rhinehart, MD
- 12:00 noon Summit Luncheon
- 1:30 p.m. Wet Clinic—CPR—William Oehlert, MD
- 1:30 p.m. SECTION UPDATES
ANGINA PECTORIS
Medical Management of Angina Pectoris
(1:30-2:00)
Lofty L. Basta, MD, Tulsa, Oklahoma
Atypical Forms of Angina Pectoris
(2:00-2:30)
John Kalbfleisch, MD, Tulsa, Oklahoma
Surgical Management of Angina Pectoris
R. Darryl Fisher, MD, Associate Professor of Surgery, Vanderbilt University, Nashville, Tennessee
Panel Discussion and Case Presentations, Angina
(3:45-5:00)
- 1:30 p.m. SECTION UPDATES
TRAUMA
Section Meeting #1
Moderator: Gerald McCullough, MD, FACS, Chairman, Oklahoma Trauma Committee, American College of Surgeons
Hyperbaric Oxygen in Trauma (Spinal Cord Injuries)
(1:30-2:15)
George M. Hart, MD, Long Beach, California
Logical Approach to the Management of Chest Injuries
(2:15-3:00)
Robert Rutherford, MD, Denver, Colorado
Infections Related to Orthopedic Problems
(3:30-4:15)
Joseph Kopta, MD, Professor and Head, Department of Orthopedics, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma
Vascular Injuries of the Neck and Shoulder
(4:15-5:00)
Ronald C. Elkins, MD, Professor of Surgery, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma
Section Meeting #2
Moderator: Joseph D. McKean, MD, Director, Emergency Physicians of Oklahoma, Inc., Oklahoma City, Oklahoma
What to Do at the Scene of the Accident
(1:30-2:15)
C. T. Thompson, MD, Clinical Professor of Surgery, University of Oklahoma, Tulsa Medical College, Tulsa, Oklahoma
John D. Anderson, MD, Director of Emergency Services, St. Anthony Hospital, Oklahoma City, Oklahoma
Maxillofacial Injuries
(2:15-3:00)
Norman Levine, MD, Chief, Section of Plastic Surgery, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma
Roy Forsythe, MD, Clinical Assistant, Department of Surgery,

University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma

Trauma in the Office, Including CPR

(3:30-5:00)

Thomas Duncan, MD, Director, Emergency Services, Baptist Medical Center, Oklahoma City, Oklahoma

Danny Cassidy, MD, President, Oklahoma Chapter of the American College of Emergency Physicians, Oklahoma City, Oklahoma

2:30 p.m. Wet Clinic—Radiology—Pulmonary—Bob Eaton, MD

Saturday, May 6

7:30 a.m. Breakfast

Speaker: Gene Hochevar, Coach, University of Oklahoma Football Team

8:30 a.m. Presentation of Scientific Papers

SPORTS MEDICINE SYMPOSIUM

8:30 a.m. Welcome

Joe Jarman, MD, Enid, Oklahoma

8:35 a.m. **Spinal and Head Injuries**

Don Cooper, MD, Director of Student Health Service and Team Physician, Oklahoma State University, Stillwater, Oklahoma

8:55 a.m. **Shoulder Injuries**

Fred L. Allman, Jr., MD, Director, Sports Medicine Clinic and Orthopedic Consultant for Georgia Tech and Atlanta Public Schools, Atlanta, Georgia

9:15 a.m. **Elbow, Wrist and Hand Injuries**

William A. Grana, MD, Assistant Professor of Orthopedic Surgery, Division of Sports Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma

9:35 a.m. **Soft Tissue Injuries**

Ken Rawlinson, Chief Athletic Trainer, University of Oklahoma, Athletic Department, Norman, Oklahoma

10:00 a.m. **Panel Discussion**

10:30 a.m. **Knee Injuries**

Don H. O'Donoghue, MD, Professor Emeritus, University of Oklahoma College of Medicine, Oklahoma City, Oklahoma

11:00 a.m. **Ankle and Foot Injuries**

Fred L. Allman, Jr., MD

11:30 a.m. **Taping Techniques**

Ken Rawlinson

12:00 Noon **Questions to the Panel**

9:30 a.m. CPR Instruction Program

Mrs. Keith Oehlert

2:00 p.m. Exhibits Close

3:00 p.m. Oklahoma Allergy Society

Anaphylactoid Reactions to Intravenous Contrast Media, Phillip Lieberman, MD, Memphis, Tennessee*

AFFILIATED ORGANIZATIONS

Thursday, May 4

Oklahoma Oncology Nursing Society Meeting

Friday, May 5

9:00-3:30 Oklahoma Nurses Association Meeting

1:30-4:00 Oklahoma Dietetic Association Meeting

*It is estimated that Oklahoma Medical Summit '78 will fulfill the requirements for 17-22 hours of Category I continuing medical education credit.

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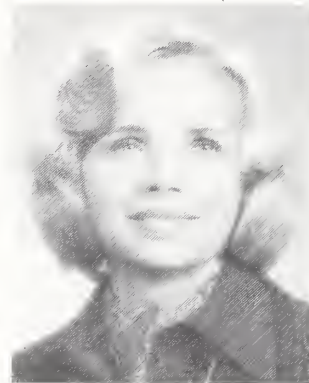
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WEDNESDAY, May 3, 1978

12:00 noon Ladies Registration-Skirvin Plaza
1:00 p.m. Pre-Convention Board Meeting—President's Suite, Skirvin Plaza
6:30 p.m. Early Bird Party
7:30 p.m. Summit Dinner/Dance
Guest Speaker—James H. Sammons, MD, Executive Vice-President, American Medical Association

THURSDAY, May 4, 1978

9:00 a.m. Registration and Credential Check—Skirvin Plaza
10:00 a.m. 1st Session of House of Delegates—Skirvin Plaza
Guest Speaker—Mrs. Chester Young, AMA Auxiliary President
Installation of Officers
10:00 a.m. Ladies Activities
Tour of Governor's Mansion and coffee with Mrs. David L. Boren
12:00 noon Summit Luncheon
Guest Speaker—David L. Boren, Governor of Oklahoma
1:30 p.m. House of Delegates
2:00 p.m. Ladies Activities
Tour-Decorator's Showhouse

3:00 p.m. Reception for Newly Installed Officers and All Members—President's Suite, Skirvin Plaza
5:30 p.m. Summit Keg and Oyster/Wine and Cheese Tasting Party
7:00 p.m. Specialty Dinners

FRIDAY, May 5, 1978

8:30 a.m. Post-Convention Board Meeting—President's Suite, Skirvin Plaza
10:00 a.m. Ladies Activities
Oklahoma Museum of Art (formerly Buttram Estate, 7316 Nichols Road)
Tour—Mr. Robert Shead, ASID
Guest Speaker—Mary Miles Clanton
12:00 noon Luncheon—Garden of Museum
Informal Modeling and Chamber Music
Hostess—Mrs. Everette Cooke, President, Oklahoma County Medical Society
6:00 p.m. Reception
7:00 p.m. Summit Dinner/Dance

SATURDAY, May 6, 1978

9:30 a.m. Cardiopulmonary Resuscitation Class—Instructor, Mrs. William H. Oehlert

Emergency Medicine Conference Scheduled

Three continuing education conferences on emergency medicine will be presented in Clinton during April and May of this year. The conferences are designed for physicians who want to update and improve their emergency medical skills, and are scheduled for April 7, 21 and May 12 at the Clinton Regional Hospital. They are sponsored by Oklahoma City's Presbyterian Hospital.

The 21-hour didactic course, which includes classroom instruction, group discussion, demonstrations and individual practice sessions, will prepare physicians to participate in the American Heart Association Advance Life Support Certification Course which will be offered in Oklahoma City in September. Course descriptions have been forwarded to the American Medical Association, the American College of Family Physicians, and the American College of Emergency Physicians for possible approval as Category I CME credit.

The Clinton conferences will be held from 9:00 a.m. to 6:00 p.m. and will cover "Plastic and Reconstructive Emergency Room Surgery"

(April 7); "Advanced Cardiac Life Support," and "Acute Pulmonary Care" (April 21); and "Management of the Patient with Multiple Trauma" (May 12).

Registration for the course is \$35 with pre-registration required. Participants outside of a 30-mile range will be eligible for travel reimbursement on request. □

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Dr and Mrs. C. S. Lewis, Jr. (r) are shown here at an OSMA Regional Meeting in Elk City. Also shown from left to right are Rick Ernest, OSMA, Lyle Kelsey, OSMA, Dr Rodney D. Steward, Dr and Mrs. William M. Leebron, Elk City, and David Bickham, OSMA Executive Director. *Photo: Richard Hess*

Medical Board Explains "Unprofessional Conduct"

According to Oklahoma law, the Oklahoma Board of Medical Examiners has the right to refuse or revoke a medical license for acts deemed unprofessional conduct. The following acts are identified by Oklahoma statutes as being unprofessional although such conduct is not limited to those items listed.

1. Procuring, aiding, or abetting a criminal operation.
2. Advertising to the public in any manner, provided, however, that a person, firm, association or corporation may place an announcement in a newspaper regarding the opening of an office, change of an address or membership in a firm, association or corporation, the closing of an office, permanent or temporary, for whatever reason, and the specialty or specialties of person or persons, firm, association or corporation.
3. The obtaining of any fee or offering to accept any fee, present or other form of remuneration whatsoever, on the assurance or promise that a manifestly incurable disease can or will be cured.
4. Willfully betraying a professional secret to the detriment of the patient.
5. Habitual intemperance or the habitual use of habit-forming drugs.
6. Conviction of a felony or of any offense involving moral turpitude.
7. All advertising of medical business in which statements are made which are grossly untrue or improbable and calculated to mislead the public.
8. Conviction or confession of a crime involving the violation of the anti-narcotic or prohibition laws and regulations of the Federal Government or the Board of Health laws and regulations of the State of Oklahoma.
9. Dishonorable or immoral conduct which is likely to deceive or defraud the public.
10. The commission of any act which is a violation of the criminal laws of Oklahoma when such act is connected with the physician's practice of medicine. A complaint, indictment or confession of a criminal violation shall not be necessary for the enforcement of this provision. Proof of the commission of the act while in the practice of medicine or under the guise of the practice of medicine shall be unprofessional conduct.
11. Failure to keep complete and accurate records of purchase and disposal of controlled drugs or of narcotic drugs.
12. The writing of false or fictitious prescriptions for any drugs or narcotics declared by the laws of Oklahoma to be controlled or narcotic drugs.
13. Prescribe or administer a drug or treatment without sufficient examination and the establishment of a valid physician-patient relationship.
14. The violation, or attempted violation, direct or indirect, of any of the provisions of this act, either as a principal, accessory or accomplice.
15. Aiding or abetting, directly or indirectly, the practice of medicine by any person not duly authorized under the laws of Oklahoma.
16. The inability to practice medicine with reasonable skill and safety to patients by reason of age, illness, drunkenness, excessive use of drugs, narcotics, chemicals, or any other type of material or as a result of any mental or physical condition. In enforcing this subsection, the Board may, upon probable cause, request a physician to submit to a mental or physical examination by physicians designated by it. If the physician refuses to submit to the examination, the Board shall issue an order requiring the

physician to show cause why he will not submit to the examination and shall schedule a hearing on the order within thirty (30) days after notice is served on the physician. The physician shall be notified by either personal service or by certified mail with return receipt requested. At the hearing, the physician and his attorney are entitled to present any testimony and other evidence to show why the physician should not be required to submit to the examination. After a complete hearing, the Board shall issue an order either requiring the physician to submit to the examination or withdrawing the request for examination. The medical license of a physician ordered to submit for examination may be suspended until the results of such examination are received and reviewed by the Board.

In addition to the above-listed acts as defined in 59 O.S. 1971, 509, the following acts are also considered as unprofessional conduct.

(a) Indiscriminate or excessive prescribing of controlled or narcotic drugs;

(b) Prescribing of controlled or narcotic drugs in excess of the amount considered good medical practice;

(c) The habitual or excessive use of any drug which impairs the ability to practice medicine with reasonable skill and safety to the patient;

(d) Prescriptions written for controlled or narcotic drugs without a medical need therefore shall be considered a false or fictitious prescription;

(e) Issuing prescriptions for narcotics or controlled drugs to minors in violation of 63 O.S. 1971, Sections 2601 through 2606. □

Course for Family Physicians Set

A continuing education seminar for family physicians will be held April 29 at the Hilton Inn in Tulsa. The meeting is the first of a series of quarterly seminars which will be held to help family physicians in Oklahoma and neighboring states meet their continuing education requirements.

Topics for the seminar include: Athletic Injuries; Recognition and Treatment of Depression; Echocardiography; The Rational Interpretation of Arterial Blood Gases; Total Joint Replacement; Therapy of Chronic Pain; The Adult Respiratory Distress Syndrome; and Management of Tachy-arrhythmias.

The seminar is sponsored by the OU Tulsa Medical College Department of Family Practice, Tulsa's Doctor's Hospital, the Tulsa and Okla-

homa Academies of Family Physicians in affiliation with the Tulsa Area Health Education Center. The seminar will offer eight hours of Category I credit toward the Physician's Recognition Award of the American Medical Association.

Registration is \$35 per person. For additional information, contact Tulsa Area Health Education Center, 2727 East 21st, Suite 107, Tulsa, Oklahoma 74114, or call (918) 749-5242. □

TELEPHONE MESSAGE

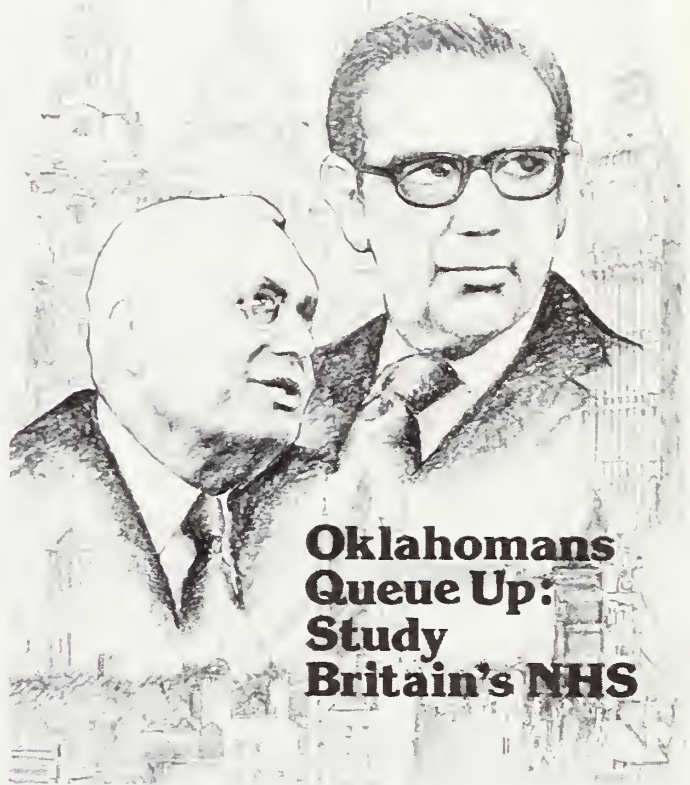
While physicians are attending Oklahoma Medical Summit '78 in Oklahoma City, emergency calls may be referred to:

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A courtesy message center will be maintained by Southwestern Bell Telephone throughout Oklahoma Medical Summit '78. The main message center will be located near the exhibit hall at the Skirvin Plaza Hotel.

JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION



For most of the 58 Oklahoma doctors who attended the OSMA London tour, England proved to be an exciting country burdened with an unworkable health care system. The March *Journal* features the first of a two-part story which investigates England's National Health Service. See the May *Journal* for the conclusion of this story plus an article on how Oklahoma doctors view the NHS.

DEATHS

CURTIS BERRY, MD
1907-1978

A Norman general practitioner for 39 years, Curtis Berry, MD, 71, died March 8, 1978. Berry, a native of Washington, Oklahoma, moved to Norman in 1920. He was graduated from the University of Oklahoma College of Medicine in 1937. Dr Berry was a member of the Cleveland-McClain County Medical Society and the American Medical Association.

WILLIAM P. FITE, SR., MD
1890-1978

A well-known Muskogee surgeon, William P. Fite, Sr., MD, died March 5, 1978. Born in Vinita, Indian Territory, Dr Fite was graduated from the University of Virginia Department of Medicine in 1916 and practiced in Muskogee until his retirement in 1971. Dr Fite served as a member of the Oklahoma State Board

of Medical Examiners for 19 years. Among his affiliations in medical circles were the American College of Surgeons, the Oklahoma Surgical Association, the International College of Surgeons and the American College of Abdominal Surgery. He was a Diplomat of the American Board of Surgery.

In 1966, the OSMA presented Dr Fite with a Fifty Year Pin in recognition of 50 years of devoted practice.

JOHN M. ALLGOOD, MD
1896-1978

Retired, general practitioner, John M. Allgood, MD, Altus, died February 4, 1978. A native of Summerfield, Louisiana, Dr Allgood received his medical degree from the University of Oklahoma College of Medicine in 1928 and established his practice in Altus in 1934. He was the father of Ed A. Allgood, MD, Snyder physician.

In 1966, the Oklahoma State Medical Association presented Dr. Allgood with a Life Membership in recognition of his years of devotion and service to his profession. □

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BOOK REVIEW

Child Health in the Community: A Handbook of Social and Community Paediatrics, Ross G. Mitchell, editor, Edinburgh, Churchill Livingstone, 1977, 315 pages, Price \$18.00

In the preface the editor states: "Throughout the world, resources for the medical care of children are largely committed to the urgent problems presented by malnutrition, infection and other acute disorders of childhood. In the more technically developed areas, however, advances in medical science have virtually eradicated some conditions and rendered the treatment of others rapid and effective. With this easing of the pressure from life threatening disease, have come a new appreciation of the importance of preventive pediatrics, greater commitment to the care of handicapped children in and out of the hospital, and realization that health care must reach those most in need."

The timing of this book is proper for several reasons. It is timely to define the content of social and community pediatrics. It is timely because both natural development and real organization of the National Health Service in the British Isles are carrying pediatrics beyond hospital confines. The seventeen chapters have been written separately by fifteen authors so that the expected variation in originality, evenness and readability is present. It is divided into five parts entitled as follows: Introduction, The Child and His Needs, The Maintenance of Health, Services for Children and Children at School. The chapters dealing with pre-school prevention and surveillance of care for children in general practice and with methods of health supervision of school children are well-written and represent useful documentation. There are also good, concise contributions on behavioral pathology, on the problems of adolescence and on handicapped children and their education. The chapter entitled "Social and Physical Environment," those dealing with delinquency and the law and with social work services for children seem sketchy in many places. The titles of some of the chapters themselves are often misleading. Although the average American reader may not agree with some of the needs and priorities in

child health, as visualized by those from the British Isles, the book is valuable in providing a perspective of the needs in child health in another country.

This collection of articles, although it is not truly a handbook as the subtitle indicates, is a useful compendium. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

FOR SALE. A well-equipped family practice office in nine-room, two-story house with large lot, two-car garage, storage room, garage apartment located at 619 West Boyd, Norman, Oklahoma. Two blocks west of main campus of the University of Oklahoma. Call T. A. Ragan, MD, 405 321-1978, 9-5 Monday through Friday.

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RANCH FOR SALE BY OWNER. 640 acres, valley irrigated land, 15 miles southwest of Lawton, Oklahoma. Five graineries, large shed, feeding pen, six-room modern house. \$650,000. 320 acres dryland, four ponds, one full of bass, two full of channel cat. Two inch steel pipe stock pens and shed, two out-buildings, two bedroom modern house, central air and heat, one extra bedroom in small house. Fourteen miles east and three north of Frederick, Oklahoma, or 20 miles southwest of Lawton, Oklahoma. \$200,000. Phone 405 235-6461 or 525-2008.

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Continuing Medical Education Programs — April 1978

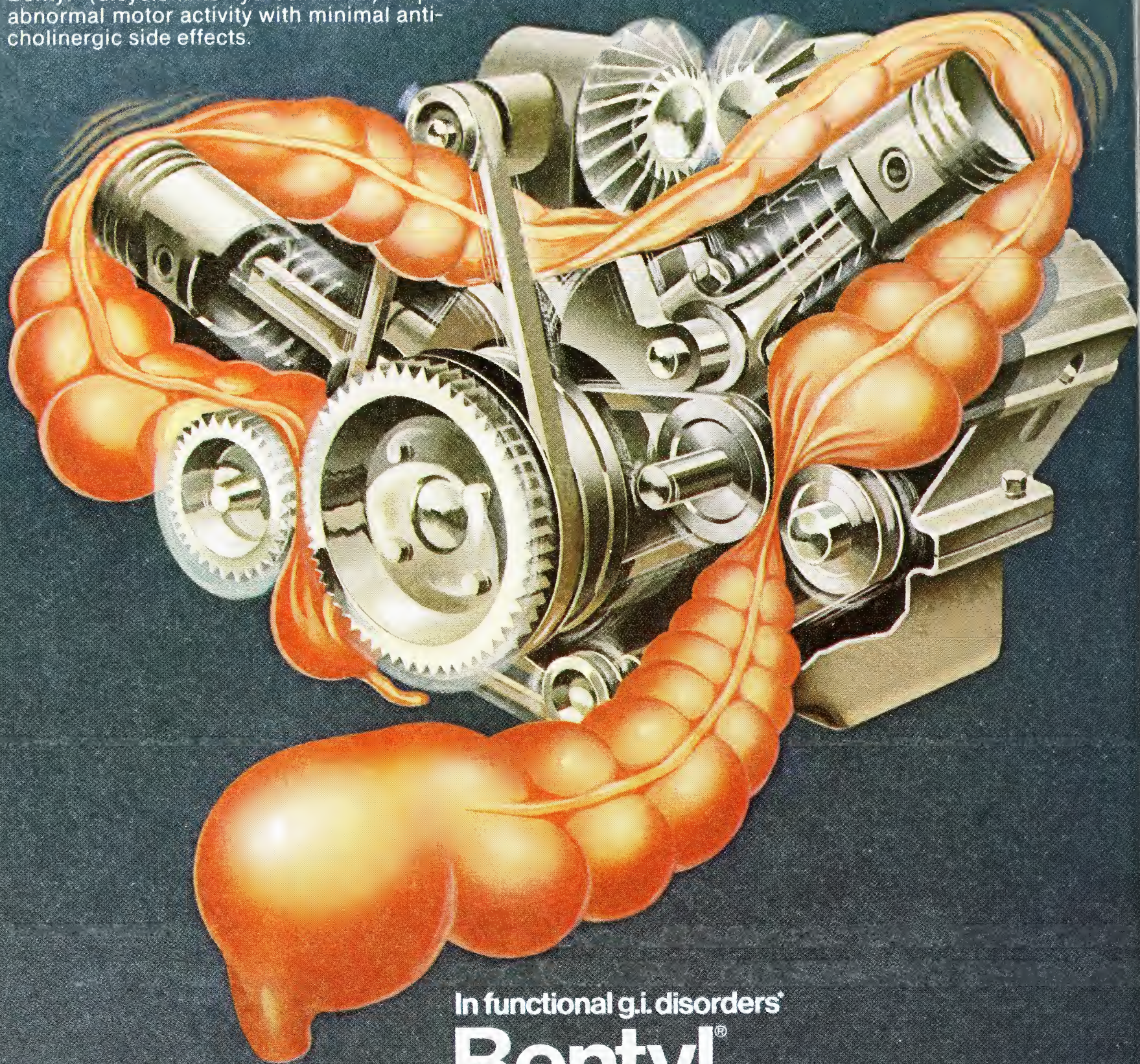
The following continuing medical education offerings have been submitted by the sponsoring institutions as having been approved by the AMA for credit in the Physicians Recognition Award. It is suggested that you contact the sponsoring institution for information concerning the exact number of credit hours and the exact category credit available.

Date	Time	Subject	Speaker and Location
April 6	7:30 a.m.	OB-GYN Grand Rounds	Hillcrest Medical Center, Tulsa
April 6	12:00 noon	Tumor Board	Hillcrest Medical Center, Tulsa
April 7	12:00 noon	Cardiology Conference	St. John Medical Center, Tulsa
April 7	12:00 noon	Hematology-Oncology Conference— Blood Component Therapy—Part I	Ron G. Schlesinger, MD, Hillcrest Medical Center, Tulsa
April 8	7:30 a.m.	Surgical Morbidity & Mortality Conference	Hillcrest Medical Center, Tulsa
April 10	12:00 noon	Nephrology Conference—Renal Tuberculosis	Alistair M. Paton, MD, Hillcrest Medical Center, Tulsa
April 11	12:00 noon	Raid Rounds—Common & Uncommon Dermatosis	Bernard A. Robinowitz, MD, Hillcrest Medical Center, Tulsa
April 11	5:00 p.m.	Cardiac Catheterization Conference	Hillcrest Medical Center, Tulsa
April 12	12:00 noon	Infectious Disease Seminar—Anaer- obic Infections	Eric L. Westerman, MD, Hillcrest Medical Center, Tulsa
April 13	12:00 noon	Tumor Board	Hillcrest Medical Center, Tulsa
April 14	12:00 noon	Cardiology Conference	St. John Medical Center, Tulsa
April 14	12:00 noon	Hematology-Oncology — Blood Component Therapy Part II	Ron G. Schlesinger, MD, Hillcrest Medical Center, Tulsa
April 17	7:30 p.m.	Role of TAT & Back Disorders	Norman Bartlett, MD, St. John Medical Center, Tulsa
April 17	12:00 noon	Nephrology Conference—Coagula- tion Factors and Renal Disease	T. Richard Medlock, MD, Hillcrest Medical Center, Tulsa
April 18	12:00 noon	Cardiology Conference—Clinical As- sessment of Coronary Artery Dis- ease and Exercise Testing	Carson A. Todd, DO, Hillcrest Medical Center, Tulsa
April 18	5:00 p.m.	Cardiac Catheterization Conference	Hillcrest Medical Center, Tulsa
April 20	12:00 noon	Tumor Board	Hillcrest Medical Center, Tulsa
April 21	12:00 noon	Cardiology Conference	St. John Medical Center, Tulsa
April 21	12:00 noon	Hematology-Oncology Conference— Hemoglobinopathies	Daniel C. Plunket, MD, Hillcrest Medical Center, Tulsa
April 24	12:00 noon	Nephrology Conference-Uroepithelial Tumors	James R. Leach, MD, Hillcrest Medical Center, Tulsa
April 25	12:00 noon	Cancer Conference—Carcinoma of the Ovary	Dwayne D. Jones, MD, St. John Medical Center, Tulsa
April 25	12:00 noon	Raid Rounds—Rheumatoid Variance and HLA	Arnold L. Katz, MD, Hillcrest Medi- cal Center, Tulsa
April 25	5:00 p.m.	Cardiac Catheterization Conference	Hillcrest Medical Center, Tulsa
April 27	12:00 noon	Tumor Board	Hillcrest Medical Center, Tulsa
April 28	12:00 noon	Cardiology Conference	St. John Medical Center, Tulsa
April 28	12:00 noon	Hematology-Oncology Conference— Cancer of the Testis	Carl R. Bogardus, Jr., MD, Hillcrest Medical Center, Tulsa
April 29	8:30 a.m.-4 p.m.	Symposium on Current Management of Acute Respiratory Failure	David Copple, MD, Hillcrest Medical Center, Tulsa

Abnormal motor function

Abnormal motor function is a frequent cause of the spasm, pain, distention and cramps that characterize a wide range of g.i. complaints. "It has been estimated that about three quarters of patients seeking medical care because of gastrointestinal complaints have functional derangements. Certainly these are more commonly related to abnormal motor activity than to anything else."¹

Bentyl® (dicyclomine hydrochloride) helps control abnormal motor activity with minimal anticholinergic side effects.



In functional g.i. disorders*

Bentyl®
(dicyclomine
hydrochloride)

10 mg. capsules, 20 mg. tablets, 10 mg./5 ml. syrup,
10 mg./1 ml. injection.

helps control abnormal motor activity.

*This drug has been classified "probably" effective in treating certain functional g.i. disorders. See brief summary.

Press Box Vision

Like football coaches, we physicians try to call the right play at the right time. To do so, we need what I call *press box vision* — a view of the situation in perspective. Coaches can get it relayed from the top of the stands; witness their earphones. For physicians, however, getting and maintaining perspective is much tougher. It takes a special blend of empathy, honesty, and book sense used with common sense.

Without press box vision, the coach and his team may lose. But football is just a game. Practicing medicine isn't.

Herbert L. Fred, MD
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Director of Medical Education
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We are grateful for the guest editorial above, submitted by our colleague from Texas. It made me think and here are some of my thoughts—

On Playing Doctor

Well now, Dr Fred, I'm sure you know that football *isn't* just a game with some people. Especially for some Oklahomans, Texans, Nebraskans and Arkansawyers. It is, to paraphrase a famous football coach, not just a part of life. It is the only life.

And lately, it seems that practicing medicine *is* becoming a game, but one in

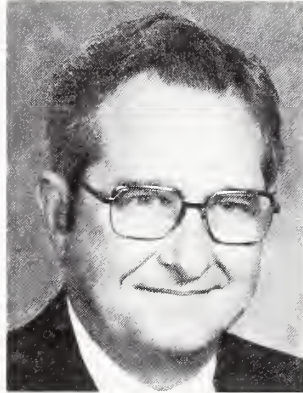
which both teams as well as all the spectators will be losers. There will be no winners, even though everyone in the stadium, including the players, officials and water boys will be bankrupting themselves making donations to support the game.

You and I don't practice medicine as if we were playing a game. However, if we were realists, I wonder if we would. Our senators and congressmen, our President and members of his cabinet have been playing doctor for so long and have had so much fun doing it that they have organized hundreds of laymen and put them on committees and councils and commissions which are authorized to play doctor with them. The game plan, which is proceeding as designed, is to take all the authority away from real doctors and give it to the playlike doctors. None of the responsibility or accountability is transferred, you understand; just the authority.

All rules and regulations which control this game of practicing medicine are now written in Washington by people who love to play doctor. The rules are changed regularly and whimsically by the self-appointed officials who never bother to ask for advice or guidance. The object of the game is no longer to achieve the goal of economical, high-quality health care: It is to defame and paralyze real doctors, substitute play-doctors and achieve the goal of total socialism.

I'm not sure that the game is football. Maybe it's button-button or Russian roulette. But it sure looks like a game to me. *MRJ*

For the past year I have been involved in an acclimation process trying to ready myself for the position I have agreed to undertake. I have been more involved in the activities and the inner workings of the state medical association than ever before, and this has proven to be both a gratifying and sobering experience. Gratifying in that I have participated in an effective medical federation which represents physicians on the many issues which now face our profession; sobering in that I have had many of my fears confirmed . . . there are those whose sole purpose it is to overhaul and to control our profession.



Over the years, and it is especially true today, the single most important force which has led to the development of the most effective health care delivery system in the world, has been organized medicine itself. We owe a debt of gratitude to the many men and women who have shaped organized medicine and who have sacrificed their time and expertise to these voluntary organizations. I feel it is a tribute to our profession that a voluntary organization like the Oklahoma State Medical Association can be so effective and make so many worthy contributions. We are fortunate to have had men and women who were so worthy of the challenge.

I am happy to follow an outstanding President, Dr C. S. Lewis, Jr., who has probably sacrificed more of his time and been available to more people on more occasions than any other person who has ever held this position.

Dr Lewis has been a strong and effective leader for physicians in this state, and the contributions he has made will be felt for years to come.

I am also happy to be inheriting a proven organization with proven leaders. The council and committee chairmen have responded extremely well to the many challenges we face, as has our staff. I would also like to pay special tribute to the auxiliary and the Oklahoma Medical Political Action Committee. Both organizations have extremely important roles to play and have carried out their jobs effectively.

It is obvious that in the coming years the challenges which are thrust upon our profession will only increase. The various cost containment measures continue to receive widespread attention throughout the country, and the Administration recently introduced S. 2755 through Sen. Kennedy which calls for major reform of the Federal Food, Drug and Cosmetic Act. Locally, issues such as workers compensation continue to grab headlines and to be hotly debated by the legislature.

The medical profession itself has much to say about the direction health care should take in this country. We must be listened to and responded to. But unless we maintain a strong, unified and effective front, our testimony will fall upon deaf ears, and we will cease to be a part of the decision-making process.

If I could accomplish one goal during my year as President of the Oklahoma State Medical Association, it would be to involve more of our members in the everyday workings of the association. We have both a history and a heritage which we have reason to be proud of, and with the help of all physicians we can continue to be an effective force.

I truly believe that the future of our profession depends upon it, and I pledge my efforts and my energy during the coming year.

Marvin K. Margo A.D.

Newer Antibiotics

DAVID L. SMITH, MD
JACQUELYN NEAL
DANIEL J. SEXTON, MD

The pharmacology and spectrum of ticarcillin and amikacin are reviewed. The probable usefulness of these compounds in clinical medicine is explored.

Recently two new antibiotics were introduced into clinical medicine. The purpose of this review is to examine these agents and to attempt to place them in perspective in the therapeutic armamentarium.

Ticarcillin (Ticar). Ticarcillin sodium (Ticar, Beecham Laboratories) was introduced in October of 1976. It is a semi-synthetic, anti-pseudomonas agent similar in chemical structure and antimicrobial spectrum to carbenicillin. It is penicillinase sensitive and like all penicillins is bactericidal. Although ticarcillin has demonstrated *in vitro* activity against many gram positive organisms, it is primarily indicated for the treatment of gram negative infections. Specifically, it is most appropriately used in the therapy of pseudomonas infections and in other difficult gram negative infections which do not respond to other agents. It has been shown to be two to four times more active *in vitro* than carbenicillin against *Pseu-*

domonas aeruginosa. It is as active against *Escherichia coli* and most proteus species, both indole-positive and indole-negative. *In vivo* serum levels required for systemic pseudomonas infections are approximately 60 mcg/ml for ticarcillin in comparison to 100 mcg/ml for carbenicillin. Like carbenicillin, ticarcillin has shown *in vitro* synergism with gentamicin, tobramycin and amikacin against certain strains of *Pseudomonas aeruginosa*. Therefore, as with carbenicillin, the combination of ticarcillin and one of the above anti-pseudomonas aminoglycosides is useful in treating such difficult infections.

Ticarcillin is not absorbed orally and, unlike carbenicillin, does not have an oral preparation available. Its pharmacokinetics are otherwise quite similar to those of carbenicillin. In one study, intravenous infusions of one gram per hour gave steady-state blood levels of 124 mcg/ml for both antibiotics. Ticarcillin is 50 to 65% bound to serum proteins, with a serum half-life of 70 minutes. It is excreted unchanged in the urine. Ticarcillin shares the low toxicity of the penicillin group of agents. It is contraindicated in patients with a history of allergic reactions to any penicillin. As with carbenicillin, high doses of ticarcillin may cause reversible hemorrhagic manifestations resulting in coagulation abnormalities. Hypokalemia may also be observed.

One disadvantage of carbenicillin has been the high sodium load seen with large doses which may precipitate congestive heart failure in patients with marginal cardiac function. Al-

though ticarcillin does not have a significantly lower sodium content per gram than carbenicillin (5.2 meq/gm of free acid vs 5.3 meq/gm of free acid respectively), the lower doses required of ticarcillin substantially reduce the sodium load. For instance, severe pseudomonas infections requiring a daily dose of 30 gm of carbenicillin result in a sodium load of 150 meq. (3.66 gm). Ticarcillin used in the same circumstances would necessitate only a daily dose of 18 gms. and would deliver only 94 meq. (2.15 gms) of sodium. The usual recommended dose for ticarcillin is three gm intravenously every four hours. Lower doses may be used for uncomplicated urinary tract infections. The serum half-life of ticarcillin is increased from 70 minutes to 13 hours in patients with severe renal failure. One study has suggested a dose schedule of two grams intravenous every eight hours for treatment of pseudomonas septicemia in patients with severe renal failure.

Ticarcillin and carbenicillin are roughly equal in cost on a gram-per-gram basis. Since lower doses of ticarcillin are required to obtain a similar therapeutic effect its total daily cost is less. Ticarcillin may be considered to be an alternative to carbenicillin in the treatment of certain serious gram/negative infections, primarily pseudomonas. Its primary advantage appears to be a reduced dosage with a concomitant reduction in sodium load and in cost of therapy.

Amikacin (Amikin). Amikacin is the newest member of the amino-glycoside family to be marketed in the United States. Its chemical structure, focus of action and pharmacokinetics, resistance and toxicity are similar to the older aminoglycosides. It does, however, have differences in spectrum which will be commented upon later.

The approach to the synthesis of amikacin may prove most useful in the development of future aminoglycosides. In the early 1970s Bristol Laboratories, utilizing a steric hindrance method, modified kanamycin to produce amikacin. Simply put, the steric hindrance approach prevents the access of enzymes which attack certain groups of the antibiotic to those groups. Amikacin was stable against most of the enzymes responsible for aminoglycoside resistance.

The spectrum of amikacin is virtually identical to that of gentamicin and tobramycin and

includes a variety of gram negative and gram positive species. The latter includes penicillinase-producing as well as methicillin/nafcillin/oxacillin-resistant strains of staphylococcus. The only major spectrum differences between this compound and gentamicin/tobramycin are: 1) Amikacin may be less effective against certain proteus species, particularly *Proteus mirabilis*. 2) Amikacin is effective against a high percentage of gentamicin/tobramycin-resistant strains. Organisms which are resistant to amikacin are rarely sensitive to gentamicin or tobramycin. Amikacin is less effective on a weight basis than is gentamicin or tobramycin.

However, amikacin exhibits lower toxicity on a mg/mg basis; therefore, a higher mg/kg dose may be administered. For comparison, the average daily dose of gentamicin for an 80 kg man would be 240 mg; for amikacin, the total daily dose would be 1200 mg. The recommended intravenous and intramuscular dose schedule for a patient with normal renal function is 15 mg/kg/d divided into two or three equal doses at equal intervals. If administered intravenously the infusion should be given over 30 to 60 minutes. The serum half-life of amikacin is two hours and a single intramuscular dose of 7.5 mg/kg produces a peak serum level of 21 mcg in

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Jacquelyn Neal received her BS degree from the University of Oklahoma College of Pharmacy in 1971. She has been employed in the pharmacy of Presbyterian Hospital since November, 1974. Since that time she has been the assistant editor of the Drug Information Bulletin published by the pharmacy of Presbyterian Hospital.

A 1971 graduate of Northwestern University Medical School, Daniel J. Sexton, MD, spent two years at the Center for Disease Control and did a fellowship in Infectious Diseases at Duke University Medical Center. He is a member of the Oklahoma City Clinic, specializing in infectious diseases and internal medicine.

one hour. With normal renal function 84 to 92% of an administered dose will be found in the urine within eight hours. Greater than 95% will be recovered within 24 hours. Amikacin is insignificantly bound to serum proteins and penetrates well into most body areas. Extensive results have not yet been reported regarding its penetration into bone, heart or central nervous system.

This drug has been approved for a spectrum of uses similar to those of the other aminoglycosides. These uses include sepsis, pneumonia, urinary tract infections, bone and joint infections and soft tissue infections in which gram/negative bacteria are implicated and for which a less toxic antibiotic will not suffice.

The usual precautions attendant to the use of aminoglycosides apply to amikacin. Thus, careful attention to renal and nerve function is mandatory. Special care should be exercised to avoid concomitant administration of other ototoxic and nephrotoxic drugs. The package insert should be consulted for modification of amikacin doses in individuals with compromised renal function. Determinations of serum antibiotic levels are very helpful to guide the clinician in modifying the dosage in such circumstances.

Preliminary studies have indicated comparable efficacy and toxicity when this compound is compared to gentamicin and tobramycin. The major additional advantage of amikacin is its

effectiveness against a high percentage of gentamicin/tobramycin-resistant strains. Thus, in institutions in which such strains are prevalent, amikacin will be valuable. Its cost is similar to the other aminoglycosides.

SUMMARY

Ticarcillin should now be considered a co-equal drug of choice with carbenicillin when a semi-synthetic anti-pseudomonas penicillin is required. Pharmacists should encourage competitive bidding on these two penicillins and stock the parenteral form which is the cheapest for the pharmacy and for the consumer. Because there is no oral form of ticarcillin, oral carbenicillin will continue to have a narrow but unique place in therapy.

Amikacin is a semi-synthetic aminoglycoside. It is a product of molecular engineering, to prevent enzyme inactivation. Its major value is as initial therapy for patients in institutions which have a high frequency of gentamicin/tobramycin-resistant organisms. It is also valuable in individual patients who show such a resistant strain. Since heavy usage of all aminoglycosides has eventually produced resistance, the wide use of amikacin is to be discouraged except in the above circumstances. □

References available from the author on request.
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UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE CONTINUING MEDICAL EDUCATION SPECIALTY COURSE

EMERGENCY RADIOLOGY

JUNE 10 and 11, 1978

HILTON INN WEST, I-40 and Meridian, Oklahoma City, Oklahoma

CONCEPTS AND OBJECTIVES

This postgraduate course in Emergency Radiology is organized by the Department of Radiological Sciences and the Office of Continuing Medical Education for Physicians of the University of Oklahoma College of Medicine. The course is intended for Radiologists and those physicians with a special interest in Emergency and Immediate Care. Newer conventional techniques will be emphasized and modalities such as Computerized Tomography, Ultrasound, and Nuclear Medicine will be discussed.

Developed By
The Department of Radiological Sciences
Office of Continuing Medical Education for Physicians
University of Oklahoma College of Medicine
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As an organization accredited for continuing medical education the Office of Continuing Medical Education of the University of Oklahoma College of Medicine certifies that this continuing medical education offering meets the criteria for thirteen (13) hours in Category I Credit of the Physician's Recognition Award of the American Medical Association.

Impact of the Day of Admission on Length of Stay in a Community General Hospital

HARRY M. DELIERE, DrPH
TOM HERRON, MPH

The day of admission influences the day of discharge in a general hospital. Weekend admissions in the study hospital resulted in noticeably longer lengths of stay than admissions on week days. Friday admissions contribute to the longest average length of stay.

While many may assume that the day of admission to a general hospital in some manner influences the day of discharge and hence, the length of stay of patients, few have studied this impact. Increasing importance is attached to length of stay as a measure of output and its reduction as a containment factor in this era of escalating costs. This study was initiated for these reasons. It was designed to verify if the day of admission did influence the length of stay of patients in a community general hospital. It proposed to test three null hypotheses:

1. There is no difference in the average length of stay of patients in a general hospital obtained from the day of admission.

2. The average length of stay in a general hospital is not affected by admission on a weekend.

3. There is no difference in the average length of stay of patients admitted to a general hospital on a Friday as compared to admission on any other day of the week.

In order to arrive at comparable and reliable results and to utilize a cross section of all physicians admitting patients to the hospital, pre- and post-operative surgically diagnosed patients for three procedures were selected for the study. These three procedures were: hemorrhoidectomy, herniorrhaphy, and cholecystectomy. These three procedures were performed by all surgeons and a majority of the general practitioners on the staff of the study hospital. Other procedures would permit systematic error by eliminating many members of the practicing staff.

The facility selected was a 400-bed, community, general, acute care, short term hospital in a large southwestern metropolitan area. During 1976, this hospital had 14,951 admissions and a staff of 76 physicians and dentists.

The data for the study were collected from the medical charts of discharged patients who had undergone one of the three selected procedures during the period July 1 through December 31, 1976. Two hundred and seventy-six charts were randomly selected. This number was reduced to 246 in an effort to eliminate systematic and

random error. Any chart indicating a length of stay (LOS) of over 20 days was preempted from the study as this increased LOS was usually due to post-operative complications or treatment for a secondary diagnosis. All charts of patients returning to surgery for correction of post-operative bleeding were eliminated as were charts of patients that expired during post-operative recovery or treatment. The charts of patients requiring intensive care following surgery were excluded. Charts of patients with additional diagnoses or treatment or additional surgery performed at the time of primary surgery were also eliminated. Finally, charts of patients leaving the hospital contrary to medical advice were removed from the study group. This elimination of charts tended to provide a more complete sample of the customary and usual excursion of pre- and post-operative management found in the majority of the cases with the admission diagnosis for one of the three procedures selected for the study.

The study involved 246 admissions and 1690 patient days for an average LOS of 6.87 days.

According to information available from the Professional Activity Service (PAS), the average LOS for hemorrhoidectomies and herniorrhaphies, using the 75th percentile, was six days while the average LOS for cholecystectomies, at the same percentile, was 11 days. A random sample, with equal distribution of the three selected diagnoses, indicated the average LOS for the three procedures in PAS reported cases to be 7.67 days. The study hospital, for this sample, had an average LOS for the three selected procedures of 0.8 days less than the hospitals reporting to PAS as a whole.

Table 1 reflects the findings of this study by the number of hospital admissions in the three selected diagnoses, the number of patient days, and the average LOS for the admissions occurring on each day of the week. It is clear that the days Friday, Saturday, and Sunday had noticeably longer average lengths of stay than the remaining days of the week. Friday admissions had an average length of stay of more than 2.5 days longer than Monday admissions. Wednesday admissions had the shortest average LOS of 5.45 days. The discrepancy of the length of stay between any two days was sufficiently significant, using the t-test with critical regions of ten percent, to reject the first hypothesis that there is no difference in the average length of stay of patients in a hospital regardless of the day of admission.

Table 2 contrasts week-day and week-end total admissions by the number of admissions, the number of patient days, and the average LOS. Friday, was, for the purposes of this study, considered a week-end day; weekdays consisted of Monday through Thursday. Weekday admissions during the study period amounted to 152 or 61.7 percent of the total admissions for the three selected procedures; week-end admissions totaled 94. The average length of stay for week-end admissions was 8.0 days, 1.8 days longer than admissions occurring on weekdays.

TABLE 1
COMPARISON OF AVERAGE LENGTH OF STAY
ACCORDING TO DAY OF ADMISSION

Day Of Week	Number of Admissions	Number of Patient Days	Average Length of Stay
Monday	54	351	6.50
Tuesday	18	108	6.00
Wednesday	51	278	5.45
Thursday	29	201	6.93
Friday	34	309	9.09
Saturday	19	154	8.11
Sunday	41	289	7.05
Totals	246	1690	6.87

TABLE 2
COMPARISON OF
WEEKDAY AND WEEK-END ADMISSIONS

Period	Number of Admissions	Number of Patient Days	Average Length of Stay	Percent of Admissions
WEEKDAYS (Monday thru Thursday)	152	938	6.17	62
WEEK-END (Friday thru Sunday)	94	752	8.00	38

Table 3 compares each of the three selected procedures by week-day and week-end admission. Week-end hemorrhoidectomy and herniorrhaphy admissions averaged a stay of 1.8 days longer while week-end cholecystectomy admissions averaged 2.04 days longer than their counterpart weekday admissions.

These data lead to the rejection of the second hypothesis: that the average length of stay of patients in a hospital is not affected by being admitted to the hospital on a week-end. As indi-

TABLE 3
COMPARISON OF LENGTH OF STAY
FOR SELECTED SURGICAL PROCEDURES
BY WEEKDAY AND WEEK-END

Type of Procedure	Number of Admissions	Number of Patient Days	Average Length of Stay
WEEKDAYS			
Hemorrhoidectomy	50	286	5.72
Herniorrhaphy	55	345	6.27
Cholecystectomy	47	307	6.53
Total	152	938	6.17
WEEK-ENDS			
Hemorrhoidectomy	34	256	7.53
Herniorrhaphy	37	299	8.08
Cholecystectomy	23	197	8.57
Total	94	752	8.00

cated in Table 2, longer lengths of stay are directly related to week-end admissions. A patient, admitted to the hospital on a week-end for one of the selected procedures could expect to spend eight consecutive days in the hospital whereas a patient admitted during the week could expect release in just over six days.

The third and last hypothesis tested, there is no difference in the average length of stay of a patient admitted to a general hospital on a Friday as compared to admission on any other day of the week, was also rejected. Friday admissions constituted the longest average LOS, 9.09 days. A patient, admitted for one of the three selected procedures on a Friday, could expect to remain in the hospital for nine days.

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Tom L. Herron received his BA and MPH degrees from the University of Oklahoma. He is assistant hospital administrator at Oklahoma Children's Memorial Hospital. Mr. Herron is a member of the Oklahoma Hospital Association (institutional member).

This study indicates that the length of stay is related to the day of admission. The average LOS for these three selected procedures was 6.87 days. The lengths of stay for weekday admissions, with one exception, Thursday, fall below the mean while the lengths of stay for week-end admissions fall above the mean in every instance. Table 2 emphasizes this fact; average weekday admissions LOS was 6.17 days; average week-end admission LOS was 8.00 days.

Many factors, uncovered during the data collection, seem to influence this extended week-end admission LOS. Principal among these was the non-utilization of services and facilities over the week-end. Almost 25 percent of the nursing services offered during the week-day shift were not offered during the week-ends. Major portions of necessary pre-operative laboratory tests could not be attempted during the week-end. X-ray, also, could not perform necessary pre-operative procedures on the week-end. These departments could not function at full capability on week-ends due to understaffing or the absence of qualified technicians. Experiencing these and similar problems, most physicians declined to order the required surgical procedures until the following Monday.

Week-end admissions through the emergency room, many times, were unnoticed by the patient's family physician until the following Monday. Frequently jobs, schools, social functions and commitments by the family of a patient eliminated the possibility of early release from the hospital.

These factors and others contributed to the increased length of stay of patients admitted on week-ends.

This study was designed to determine the average length of stay of patients entering the community general hospital on the basis of uniform criteria for surgically disposed patients. The final analysis points to week-end admissions increasing the average length of stay for the three selected procedures. The study does not suggest that these findings are a true indicator of the average LOS in all hospitals. Further research is required before these data can be applied as a universal measure to other hospitals. The study does, however, point to a need for consideration of week-end hospital operational improvement. □

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Adult Gaucher's Disease

A Report of Three Cases in Northeast Oklahoma

JANE SELF, MD
ROBERT S. WHITE, MD
JAMES KING, MD

A rare entity, adult Gaucher's disease usually presents with hematologic abnormalities suggesting hypersplenism. Consideration of this entity is appropriate in any patient with a suspected hypersplenic state.

Gaucher's disease is an inborn error of metabolism characterized by an abnormal accumulation of galactocerebrosides, and glucocerebrosides and polycerebrosides within the cytoplasm of reticuloendothelial cells. This abnormal storage relates to a deficiency in the enzyme beta glucosidase which is uniformly diminished in the reticuloendothelial tissues of these patients.¹ This disease may present as the adult type, the acute neuronopathic, or subacute neuronopathic type. The latter two occur in children. All forms exhibit four common features: Hepatosplenomegaly, presence of Gaucher's cell in the bone marrow, an increased acid phosphatase in the serum that is nontartrate inhibitable, and a decrease of beta glucosidase in tissue homogenates.

The adult form may be asymptomatic and incidentally diagnosed, but when symptomatic the symptoms relate to bone pain with or without pathologic fractures, or clinical manifestations of hypersplenism. In the adult form of this disease, associated malignancies such as acute myelogenous leukemia, astrocytoma, Hodgkin's disease, and multiple myeloma have been reported. Clinical problems relating to esophageal varices due to portal hypertension, a variable factor IX deficiency which may lead to a clinical bleeding diathesis other than the usual one associated with a thrombocytopenia of hypersplenism, abnormal lymphography confusing the evaluation of a patient with Hodgkin's disease, and the presence of monoclonal gammopathies have all been described with the adult forms. In addition, adults have been reported with seizures and disturbances in extraocular movements indicating that some adult cases may have neuronopathic aspects of their presentation.

The purpose of this paper is to present three cases of the adult form of the disease. Although there is no specific therapy for this disease process, all patients had a common feature in their histories in that splenectomies were either recommended or performed on these three patients unnecessarily because the correct diagnosis had not been established.

CASE NUMBER ONE — RH

An 18-year-old white female, ancestry un-

known, presented with a nine-year history of borderline thrombocytopenia and easy bruising. At age nine years, she had undergone tonsillectomy and adenoidectomy following a long history of frequent colds and sore throats. At surgery, bleeding was noted to be excessive, and she was treated with local pressure packs and Aqua Mephyton injections. Complete blood count and bleeding time were normal. Since that time she has been followed for mild thrombocytopenia; platelet counts ranging from 84,000 per cubic millimeter to 90,000 per cubic millimeter. She experienced frequent bouts of prolonged epistaxis and large ecchymoses developed over the arms and legs with minimal trauma. Following menarche, menses were heavy but regular. There were no hemarthroses, no family history of bleeding disorders and small lacerations and dental extractions did not produce excessive bleeding. A bone marrow examination in 1973 was interpreted as showing increased megakaryocytes with an otherwise normal pattern and a diagnosis of idiopathic thrombocytopenia of the chronic type was made. After steroid medication was begun, there was a temporary increase in the platelet count, but this soon returned to the previously low level. After showing no response to a five-month course of Cytoxan and prednisone, she was admitted to the hospital for splenectomy. Physical examination revealed scattered petechiae over the lower extremities.

There was no hepatosplenomegaly, lymphadenopathy or increase in skin pigmentation and the remainder of the physical findings were normal. Laboratory data included hemoglobin, 13.1 grams percent; hematocrit, 37.0 percent; white blood count, 6,400 per cubic millimeter with a normal differential. Platelet count was 79,000 per cubic millimeter. A urinalysis was negative and the VDRL Test was non-reactive. Multiphasic chemical screening profile, serum creatinine phosphokinase and electrocardiogram were normal. Protein electrophoresis was normal but immuno-diffusion revealed increased IgM to 335 milligrams per deciliter. Partial thromboplastin time was 42 seconds with normal control. At surgery, the spleen was found to be markedly enlarged weighing 860 grams and measuring nearly 21 centimeters in length. Microscopic examination revealed a diffuse pattern of accumulation of reticuloendothelial type cells within the sinusoidal

spaces, with eccentric nuclei and also binucleated cells. No mitotic figures were present. There was abundant cytoplasm with linear striations, characteristic of Gaucher's cells. Fat stains were negative while periodic acid Schiffs and iron stains were positive. A bone marrow biopsy which had been done prior to surgery was reviewed and found to contain Gaucher's cells. A serum acid phosphatase was elevated to 2.50 units with the prostatic fraction being 0.08. A bone survey was negative. Postoperatively, the platelet count rose to 312,000 in four days and the patient made an uneventful recovery and has done well since that time.

CASE NUMBER TWO — JK

The patient is a 48-year-old white female, ancestry unknown, who two years ago underwent abdominoperineal resection for adenocarcinoma of the rectum. This had followed a four-month history of occasional painless rectal bleeding. She denied any other abdominal symptoms. Previous surgeries included a vaginal hysterectomy for leiomyomas and a prosthesis in the left orbit for replacement of a "congenitally blind eye." The patient had had no other serious medical illnesses. Family history revealed the mother died of carcinoma of the liver with metastasis to lungs and the father died of carcinoma of the bladder. Four siblings are alive and well.

A barium enema one year after the bowel resection was normal but splenomegaly was noted. The patient was advised by her physician to have a splenectomy. She sought consultation elsewhere and the presence of the splenomegaly without other hepatomegaly or lymphadenopathy was identified. Hemoglobin was 11.6 grams percent; hematocrit, 34.0 percent with normal indices. White blood count was decreased to 2,800 per cubic millimeter with a normal differential. Platelet count was 11,000 per cubic millimeter. Urinalysis was normal. Carcinoembryonic antigen was 2.3 nanograms per deciliter. The results of a multiphasic chemical screening profile and x-rays of the chest, spine and pelvis were within normal limits. An intravenous pyelogram revealed no abnormalities. Liver scan revealed increased isotope uptake in the liver and splenomegaly. Bone marrow examination revealed typical Gaucher's cells. No surgery was performed and the patient is now asymptomatic.

The patient, a 61-year-old white male, ancestry Jewish, was seen initially with a four-month history of chronic otitis media. He had also been troubled for many years by chronic low back pain, particularly with exertion, but x-rays of the spine were normal. He denied any history of bleeding disorder or easy bruisability. He also denied any previous medical illness and had never been hospitalized. Physical examination revealed bilateral corneal arcus. Funduscopic examination was normal. There was a Grade II/VI holosystolic murmur heard best at the apex which radiated to the axilla, but there was no evidence of cardiomegaly. Examination of the chest revealed decreased breath sounds in both bases. No hepatosplenomegaly or lymphadenopathy were present. There were bilateral recurrent hydrocoeles that had been repeatedly aspirated. Hemoglobin was 11.0 grams percent; hematocrit 34 percent with normal indices. White blood count, 4,900 per cubic millimeter with a normal differential. Reticulocyte count was 0.9 percent. Platelet count was 75,000 per cubic millimeter. A prothrombin time and partial thromboplastin time were within normal limits. Chest x-ray revealed fib-

rosis in both lung bases. An upper gastrointestinal series was normal except for the presence of a small sliding hiatal hernia. An attempt at bone marrow aspiration was unsuccessful, but bone biopsy revealed hypercellularity, increased megakaryocytes and mononuclear and binuclear histiocytes characteristic of Gaucher's cells.

DISCUSSION

As with previously reported cases, these three cases all had abnormalities in the hematopoietic system; three with thrombocytopenia, two with mild anemia, and two with mild leukopenia. Two of the patients had complaints of skeletal pain although no patients had abnormal radiographs of bone. All had in common the fact that when seen initially by a physician, Gaucher's disease was not considered in the differential diagnosis. Splenectomy was considered in two cases and performed in one. It is to be emphasized that unless the patient has a serious clinical problem relating to hypersplenism, splenectomy is not necessary.

The diagnosis of Gaucher's disease should be entertained in any patient presenting with hypersplenism without an obvious cause for this clinical syndrome. Bone marrow examination is probably the most reliable diagnostic tool. However, other means for making the diagnosis include measurement of serum acid phosphatase, and measurement of beta glucosidase activity in peripheral leukocytes.²

SUMMARY

Three patients with adult Gaucher's disease had a diagnosis established during the course of evaluating peripheral cytopenias, with a probable cause of these findings being hypersplenism. Gaucher's disease should be considered in this clinical setting, and the findings on bone marrow examination in these three patients was diagnostic for the disease. Consideration of this disease may help avoid unnecessary splenectomy. □

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Robert S. White, MD, a graduate of Louisiana State University Medical School, has been certified by the American Board of Pathology. He is clinical associate professor at the University of Oklahoma Tulsa Medical College. Among his medical affiliations are the American College of Pathology and the American Society of Clinical Pathology.

A 1976 graduate of the University of Oklahoma College of Medicine, James C. King, MD, is practicing in Neosho, Missouri. He is a member of the American Academy of Family Practice.



News From The Oklahoma State Department of Health

"Healthline," an information service of the Oklahoma State Department of Health, is a central clearing house where with one phone call, persons can obtain information about health services throughout the state of Oklahoma.

Utilizing an up-to-date rolodex file of all health resources and programs available in the state, trained personnel go to work quickly to assist callers in identifying the closest and most appropriate resource to meet their particular need.

The need varies according to the individual; from little ladies lonesome and needing to talk with someone who will take the time to listen — to teenagers needing help, and afraid to let a friend know, appreciate confiding to someone on the phone with an understanding voice.

Here is a sample of Healthline calls:

A teenager takes too many aspirin tablets and is scared.

A call from a mother whose child needs dental care. (Parents are able to pay.)

Lady needs to see her doctor but is unable to pay taxi fare.

A group of high school students need a speaker on family planning.

A mother whose pre-schooler seems to be a little slow in learning wants an opinion and possible help. She can afford to pay within reason.

A lady has "head rights" but doesn't know where the Indian Clinic is located.

A woman living alone calls on Christmas Eve. She needs food for Christmas dinner. Through the Governor's "Straight Line," Healthline was able to get food to her within two hours.

Persons who need health resource information can call Healthline at 271-4725.

All calls are confidential. ☐

COMMUNICABLE DISEASES IN OKLAHOMA FOR FEBRUARY, 1978

DISEASE	February 1978	February 1977	January 1978	Total To Date 1978	1977
Amebiasis	3	—	—	3	—
Brucellosis	1	—	—	1	—
Chickenpox	—	192	—	—	345
Encephalitis, Infectious	—	—	—	—	1
Gonorrhea (Use Form ODH-228)	953	920	949	1923	1902
Hepatitis, A, B, Unspecified	58	75	26	84	126
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	4	1	1	5	1
Meningitis, Aseptic	3	1	4	7	4
Mumps	—	106	—	—	199
Rabies in Animals	16	19	12	28	38
Rheumatic Fever	—	1	—	—	1
Rocky Mountain Spotted Fever	—	—	—	—	1
Rubella	1	4	2	3	8
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	—	16	4	4	23
Salmonellosis	15	2	12	27	9
Shigellosis	6	3	13	19	6
Syphilis, Infectious (Use Form ODH-228)	13	5	10	14	23
Tetanus	—	—	—	—	—
Tuberculosis, New Active	35	29	15	50	45
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—
Whooping Cough	2	—	1	3	1

Oklahomans Queue Up — Study Britain's NHS — Part II

By Richard L. Hess

OSMA Associate Executive Director

After our introduction to London and two days of acclimation, most of us on the OSMA-sponsored tour of Britain's National Health Service awoke the third morning rested and anxious. On schedule for that day was a tour of the Birmingham and Oxford Health Authorities.

The first lesson we learned that morning was that you cannot estimate travel time based upon Oklahoma experience. Our training plus common sense told us that two and a half hours was plenty of time for the trip to Birmingham. What our training and common sense didn't tell us was that English travel is much different from that in Oklahoma. Three hours and several traffic jams later, we arrived in Birmingham, only to find that even English bus drivers are sometimes confused by the confusing, hectic nature of English travel. Forty-five minutes after arriving in Birmingham, our driver was finally able to find the Birmingham Health Authority . . . located in one of Birmingham's larger buildings. As always, we were greeted with hospitality and friendliness by the panel of doctors and administrators which had been assembled to speak with us. Our host, John Bettinson, LLB, chairman of the Birmingham Health Authority, even apologized for the traffic and the fact that it had detained us.

Bettinson said that Birmingham was England's second largest city and the industrial center of the country. More than one million people are crammed into an area of approximately 100 square miles and are responsible for much of the English industrial goods.

"We are known as the city of a thousand

and one trades, and we used to boast that there weren't many things which weren't made in Birmingham."

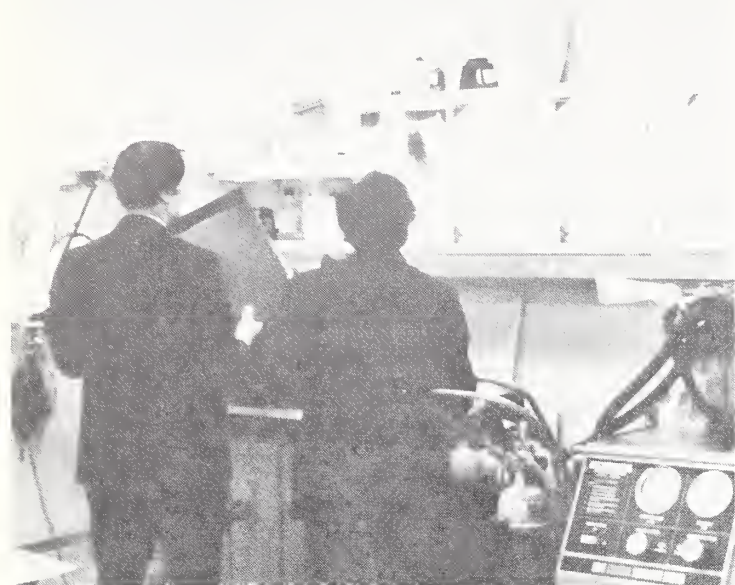
In order to care for the health needs of Birmingham's population, said Bettinson, we have approximately 40 hospitals, and the National Health Service employs about 18,000 people. Additionally, he said, there are the general practitioners who are independent and merely enter into contract with the NHS.

The first speaker, Dr A. C. Houghton, was one such physician. Dr Houghton is chairman of the Family Practice Committee in Birmingham which is responsible for overseeing family practice services in the area.

Dr Houghton described a few of the differences between pre- and post-NHS medicine in England. He said whereas in 1938 three-quarters of the work load came from private patients and only a fourth were National Health Insurance patients, now the situation is reversed. He insisted that he was not salaried and was entirely independent.

"We work on a capitation basis. We get basic expenses in some form or another and then so much per patient. Two pounds a year . . . what's that, \$4 . . . for anybody up to age 65. We get a little more for those between 65 and 75, and we are paid \$8 a year for caring for patients over age 75."

Next came Dr D. L. Cromby, a senior partner in a large general practice partnership and director of the Royal College of General Practitioners. Dr Cromby said he had a great deal of professional independence within the NHS and that the five doctors in his partnership were allowed to run their affairs entirely.



London's private health facility . . . the Wellington Hospital.

"We are quite autonomous; we are perhaps the most autonomous kind of group within the Health Service. We make our own decisions about practically everything."

Dr Cromby said the main difference between a group practitioner and a health center practitioner is that he is able to have more control over his practice. He said that as long as group practices such as his meet certain requirements for waiting rooms, consulting rooms, etc, a large portion of the expenses will be paid by the government. He also said that as much as 70 percent of the expense of non-physician staff will be paid by the NHS.

As far as his personal income is concerned, said Dr Cromby, it is quite adequate. He said each of his partners gross approximately \$50,000 per year, but admitted that taxes cut deeply into that.

Cromby also said his group practice was associated with a district nursing service and a pediatric care service. Problems arise here, however, because these services are organized geographically, whereas his group medical practice is not.

We are personal doctors, said Cromby, and we want to remain that way. So the stricter boundaries imposed by the NHS do present some problems.

Next we heard from Dr G. M. Coleman, part of a large health center partnership and a general practitioner member of one of Birmingham's district management teams.

Birmingham is divided into five districts, and each of these districts has a team which consists of an administrator, a finance officer, a nursing officer, a district community physician, two lay members, a consultant and a general practitioner (Dr Coleman).

Dr Coleman appeared to be the youngest member of the group of physicians who spoke to us that day, and he was the most outspoken critic of the group. Coleman comes from a medical family . . . his grandfather was a general practitioner in the coal mining region of South Wales.

Coleman said his grandfather had been extremely opposed to the National Health Service and had traveled around the countryside prior to 1948 trying to persuade general practitioners not to join the NHS. Coleman said in his capacity as the general practitioner member of the West Birmingham District Management Team, he helps oversee the administration of 13 hospitals, 2,000 nurses and a budget of approximately 20 million pounds. He said although this sounds like a great deal of money, it is nowhere near enough.

According to Coleman the GP member of the team is elected to a four-year term by his colleagues in the area. He said the consultant member is also elected, but the other four are permanent appointments made by the health authority.

In addition to serving on the management team and doing his general practice, Dr Coleman said he also worked with Dr Peter Lord, the general surgeon we had heard from the day before, as a clinical assistant in surgery at one of the local hospitals. He said general practitioners have the option of working in hospitals in this capacity, although they do not have general hospital privileges.

Dr M. W. Mills, a solo general practitioner, then told us that solo practitioners are getting less and less common and that this type of practice is not encouraged within the NHS. He said that doctors in groups of three or more are paid 400 pounds a year more than the fee paid to solo practitioners. Policies of the NHS, he said, make it very difficult on a doctor who wants to practice on his own.

Ken Day, administrator of Birmingham's Family Practitioners Services, brought a different perspective to the discussion. Day explained that in addition to primary medical care services, the Family Practitioner Committee also oversees dental services and

pharmaceutical services. He said members of the committee (general practitioners, dentists, opticians, etc.) are unique in the health service in that they are independent contractors. Everyone else, he said, including himself, the hospital consultant, nursing staff, midwives, etc. are employed personnel.

One of the primary responsibilities of the family practitioner committee, said Day, is to investigate any complaints. He again said that the level of complaints was extremely low. Of 110,000 persons with five physician contacts per year, only about 50 or 60 valid complaints are received. Of those, he said, full investigations bear out only about a dozen in which the doctor has been at fault.

The question and answer series which followed was even more revealing than the program. We were told that the National Health Service is financed primarily through an employee deduction with approximately 85 percent coming from taxes and 15 percent coming from user contributions.

We also learned that many English physicians are quite satisfied with the National Health Service and would not welcome drastic changes. During the discussion it became evident that these physicians had been born, raised and educated under either a National Health Insurance scheme or the National Health Service. Therefore, the concept of private practice was quite foreign to them. One doctor, for example, said that he did not like asking patients for payment, and therefore prefers the National Health Service method.

We also learned, however, that there is a large group of young physicians who are not intrigued by the NHS and who would welcome a change. Dr Cromby, the youngest physician of the group, said he would like to practice under fee-for-service circumstances where the patient appreciates the medical care which he is given. He said there is much waste under the National Health Service, and he predicted that as more young physicians with similar attitudes enter practice, the National Health Service will change.

We also learned that family physicians not only do not have hospital privileges, but often when they refer patients to hospital-based consultants, they never learn the complete findings. This is especially true of pathology and radiology. Those reports which are forwarded back to the family physician often arrive weeks after the patient.

The question and answer session also revealed a bed rate for Birmingham of 9.1 per 1,000, an average annual income for general practitioners of \$15,000 per year, and an average patient load of 2,500-3,000 per physician.

Although we were late in arriving and did not have as much time as we would have liked, the visit to the Birmingham Health Authority proved to be one of the most educational parts of the program. Looking from the windows of the twelfth floor office, you could see the industrialization that has made Birmingham famous. Factories scattered throughout, streets and highways twisting and turning in every direction and busy crowds of people returning from lunch. In many ways Birmingham is very much like one of America's industrialized cities . . . perhaps Pittsburgh. And yet their philosophy of health care is so much different.

From Birmingham it was a two-hour bus ride across the English countryside through Stratford on Avon to our next stop in Oxford. Oxford is the site of the Oxford Area Health Authority, and of course, one of England's educational centers.

We viewed Oxford's new hospital from a distance, and due to the late hour went di-



Dr Reginald S. Murley, president of England's Royal College of Physicians.

rectly to the old section for a discussion with local physicians.

Oxford physician, Dr Gatherer, remarked that during a recent trip to the United States he had felt that the major difference between the English system and the American system was a so-called source of the health care crisis.

"In this country the people you hear talking about a crisis will tend to be the doctors themselves. In your country the people who talk about the crisis tend to be ordinary members of the public."

Gatherer said there was a high degree of public satisfaction with the National Health Service in England, but he also admitted that English citizens were not encouraged to complain.

All in all, said Gatherer, the people seem to appreciate the type of care they receive. Nonetheless, said Dr Gatherer, there are resource problems in this country which most doctors are more than willing to talk about.

Dr Gatherer said he worked within a small branch of medicine called Community Medicine. In the United States, he said, this would be equivalent to a medical research unit at a university.

Research, he said later, has been cramped in England due to a lack of funds. Less than \$400,000,000 a year is spent on official medical research.

"Research is certainly very much kept under control in this country," he said.

Our problem is traced directly back to the main problem within the NHS, said Gatherer, that of limited funds and resources. This, he said, affects all areas of medical care.

Another problem identified by Dr Gatherer is that of access to medical care. Even though national health insurance and Britain's National Health Service are often heralded as the answer to America's so-called maldistribution problems, the NHS apparently has not wiped out this problem in England. Still, said Gatherer, the system has had some positive results.

He said the NHS does not attempt to improve its physician distribution by sending doctors to specific areas. Rather, he said, we affect physician distribution by creating jobs and by establishing hospitals in certain parts

of the country. This has enabled us to spread hospital and medical services more evenly throughout the country, he said.

Two other problems we face here in England, he said, are the lack of the latest equipment and an older population. He pointed out that the National Health Service controls items like total body scanners, etc. resulting in a total of only five scanners in all of England. On the other hand, said Gatherer, I understand there are ten scanners in Oklahoma which only has a fraction of our population.

Our older population presents problems, too, said Gatherer, and "we have not yet sorted out just how to deal with some of the health problems of those who are chronically sick or those who are elderly."

Asked how the National Health Care Service can base its system on family practice and yet provide lower compensation, fewer benefits and no hospital privileges, Gatherer indicated that there were no real problems regarding recruitment. He said in the last ten years there has been a swing away from high technology medicine and more emphasis given to general practice. As a result, he said, we still get the best students, and competition for positions in medical schools is still high. Greater emphasis on family medicine has caused some problems with hospital consultant positions, said Gatherer, but family practice is very strong in England at this time.

Family physicians, he said, are gaining more hospital rights, although they still are not allowed many of the privileges family physicians have in the United States.

"General practice doctors stay almost entirely to what I think you would call ambulatory care. Now whether we can afford to continue this system in the future, I don't know."

Although general practice physicians still do some obstetrics, the trend is away from this, said Gatherer. In fact, he said, a field committee report recently recommended that obstetrics be 100 percent hospital service (consultant). He also said that a majority of the actual deliveries are performed by nurse midwives. This brought a very interesting question from one of the Oklahoma doctors . . . in England nurse midwives are allowed hospital privileges and family doctors are not?

This apparently is the situation, although Gatherer was quick to point out that midwives are supervised by the staff obstetrician. Still the wisdom of this arrangement escaped most of us.

We also learned that pediatrics is almost entirely hospital based, although there is a small amount of what is called child health work or the school health service. Generally family physicians treat most normal illnesses of children and the pediatrician enters into the picture only to treat the more rare or complicated problems.

Gatherer said preventive medicine or screening is quite good in England although not quite as advanced as it is in the United States. States.

"We spend a fair bit on the school health service which many people feel is perhaps a little bit of a luxury when the vast majority of our children are extremely healthy."

Until recently, he said, 100 percent of the children in Oxford were immunized against the more common childhood diseases. He admitted this figure had now slipped, but said still over 80 percent of the children in the area were fully protected.

Another question of particular interest to the Oklahomans in the crowd concerned the size of the English hospitals and their quality.

Interestingly enough, Gatherer said that there were a great number of community hospitals with approximately 50 beds and also a number of cottage hospitals with nine or ten beds. The philosophy, he said, is to provide at regional centers such as Oxford the x-ray, pathology, biochemistry, etc. which are necessary to the community hospitals and to either phase out or expand the cottage hospitals. He admitted, however, that the small nine or ten bed hospital is very popular with the local community, and he predicted a difficult time in changing these.

"Quality assurance," said Gatherer, "is a very new idea. We haven't done very much of this. We have concentrated on the idea that we train our doctors the correct way and they will set a suitable professional standard."

Overall, said Gatherer, I would suspect that teaching hospitals such as the one here at Oxford are of a little higher quality than the national standard. He said a system of merit awards exists in England by which



Dr G. M. Coleman, plus other doctors and health care administrators from the Birmingham Health Authority, explains the inner workings of the National Health Service.

hospital departments can receive additional salary because of outstanding merit.

I think the figures show, said Gatherer, that teaching hospitals receive more of these merits than do most others.

"I would say that in general terms we have more doctors and we have more nurses and a slightly better type of service in a teaching hospital compared to the average, but the difference is not all that obvious."

Even across the Atlantic Ocean the medical profession seems to be wrestling with some of the same problems we are facing here in the United States. Dr Gatherer said the question of who will receive renal dialysis and whether coronary bypass operations will be performed have received a great deal of attention in England. The answers, however, have been much different than the ones we decided upon here in the United States.

For example, the question about coronary bypass operations was easily answered . . . for all practical purposes these operations are not performed. Neither are heart transplants. Dr Gatherer said the English are waiting for their American counterparts to discover more about these operations, and then the National Health Service will base its final decision upon American experience.

The question about renal dialysis was solved in much the same way. There are dialysis machines, but on a much smaller scale than here in the United States. The National Health Service considers this one of their major successes; there are sufficient machines to meet the obvious needs. However, what they do not seem willing to admit is that the strict criteria for referral has altered the actual figures significantly.



One of England's few new hospitals located in Oxford.

By artificially limiting the number of persons who can qualify for renal dialysis, the NHS is able to put a lid on the total amount of services rendered and thus their health care bill. This philosophy was apparent, not only for renal dialysis but also for coronary bypasses, heart transplants, pacemakers, and in fact the entire scope of the National Health Service. Without a fee at the time of service, this seemed to be the only method of curbing the use and cost of health care.

The question of how much actual influence the medical profession has on medical practice in England was bound to come up. According to Dr Gatherer, English medical doctors have a great deal of influence over the day to day practice of medicine but somewhat less influence on the broad decisions of resource allocation. Dr Gatherer said the lay people who help determine the direction of medicine in Great Britain are generally good people who are helpful in determining priorities. He said the English review process is a system that works reasonably well, although he admitted that doctors have been forced to relinquish a part of their control over their own destiny.

The second day of our trip with stops at both the Birmingham Health Authority and the Oxford Area Health Authority proved to be one of the most informative. We had had the opportunity to talk with practicing doctors, health authority administrators, lawyers, lay people, plus we learned how these health authorities actually function.

From Oxford it was a long bus ride back to the hotel with an exciting trip through the streets of London at rush hour. The following

two days would be open with some physicians taking a side tour to Paris, some boarding a train to Edinburgh, Scotland, and many of us staying in London to take a closer look at what we had heard so much about during the previous two days. Monday, though, our tour would be continued with programs at the Royal Northern Hospital and the Kings Fund Center. Also ahead of us was the tour and lecture series at London's Royal Free Hospital.

By the time we arrived home it was dark and all of us were tired from the long day's activities. Still, though, we had a better understanding of the National Health Service, and although we all looked forward to two days on our own, we also looked forward to Monday and the continuation of the program.

Editor's Note: The conclusion of this three-part series on the OSMA-sponsored tour of England's National Health Service will be carried in the July Journal. □

Pulmonary Disease Conference Scheduled for June

The Twenty-Fifth Annual Pulmonary Disease Conference will be held June 2-4, 1978, at the Western Hills State Lodge, Wagoner, Oklahoma.

This major pulmonary conference is sponsored by the Oklahoma Thoracic Society and the Kansas Thoracic Society in cooperation with the Oklahoma Lung Association, the Kansas Lung Association, and the Oklahoma State Department of Health.

Special guest faculty includes William H. Thurlbeck, MD, pathologist from Winnipeg, Canada; Arthur Nelson, MD, thoracic surgeon from Phoenix, Arizona; and Kenneth M. Moser, MD, pulmonary internist from San Diego, California. Other participating faculty members are from medical schools in Oklahoma, Kansas and Idaho.

As an organization accredited for continuing medical education, the American Thoracic Society certifies that this continuing medical education activity meets the criteria for credit in Category I of the Physician's Recognition Award of the American Medical Association. In addition, application has been submitted to the American Academy of Family Physicians and the American Osteopathic Association for continuing medical education credits.

A statewide mailing on the full program will be made to all Oklahoma physicians. □



Time is money.

And lost time is lost money. That's why your organization has negotiated and endorsed a Disability Income Plan . . . one that will pay you a continuing income benefit if you are disabled. It can provide you with critical income for several months—or even several years.

The Plan is sponsored and approved by the Oklahoma State Medical Association. For costs and further details of the coverage, including exclusions, limitations and the terms under which the policy may be continued in force, contact your administrator.

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PSRO Contract Signed

On May 1 the Oklahoma Foundation for Peer Review and the Oklahoma Utilization Review System made a dramatic changeover, going from a demonstration project to a fully sanctioned Professional Standards Review Organization (PSRO).

After nearly two and a half years of writing and planning, the OFPR signed a formal contract with the Department of Health, Education and Welfare on March 28 agreeing to establish an operational PSRO in the state of Oklahoma. The contract calls for a total budget of \$521,306 and became effective in April.

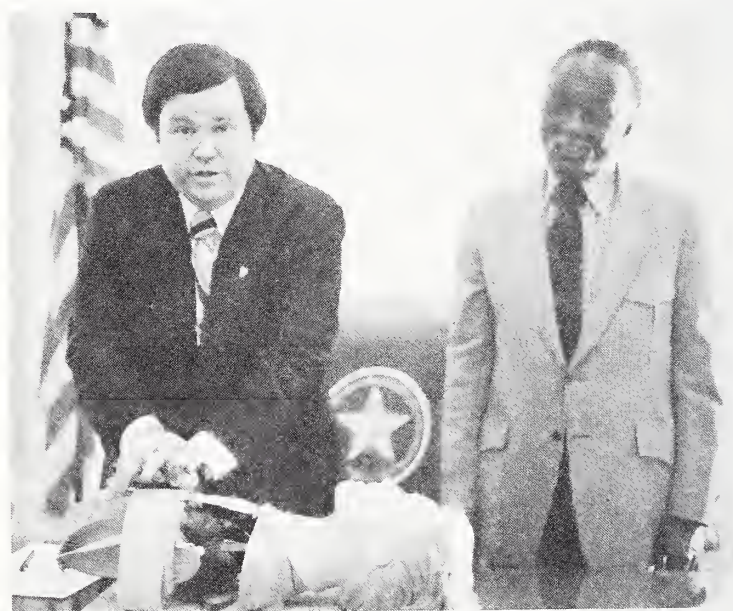
The PSRO contract calls for the OFPR to adopt and/or adapt a set of norms and standards describing the utilization of health services in hospitals and to apply them to the review of such services "in accordance with the Oklahoma Utilization Review System described in (the) formal plan." This authorizes the OFPR to conduct the concurrent review portion of PSRO according to the OURS program. The last day of the demonstration project for OURS was April 30, and since that time the OFPR has been working on the changeover to an operational PSRO. OFPR Executive Director Ed Kelsay said a period of three to four months will be required before the entire PSRO plan is fully operational. He also explained a series of personnel training seminars will be conducted during the latter part of May for hospital administrators, review coordinators, medical record personnel and claims personnel.

Although the OFPR, the Oklahoma State Medical Association, the Oklahoma Hospital Association and the Oklahoma Osteopathic Association had spent considerable time in developing and perfecting the OURS concept, for a short time it appeared that it would all be for naught. A telephone conference call between HEW Dallas officials and OFPR President Dr Hillard E. Denyer was held on March 16 to finalize negotiations on the contract. However, according to the OFPR, it soon became obvious that "the HEW contracting personnel had only one purpose in mind . . . to cut the proposed Oklahoma PSRO budget as much as possible." According to the OFPR, the budget had been carefully constructed over a two-and-a-half month period,

but was officially ignored by HEW. Apparently HEW quoted maximum dollar amounts for items with little or no regard to the market situation in Oklahoma or the type of program involved.

A week later the OFPR reluctantly accepted the contract offered by HEW. According to Kelsay, "My recommendation to accept the contract was made with great reluctance. However, our PSRO planning contract was slated to end on March 31, and the OURS contract would end on April 30. Failure to enter into a PSRO contract at this time could have resulted in Oklahoma's hospitals having to do utilization review under the original 1974 federal regulations. Then, if we didn't negotiate a contract with a higher budget, hospitals would again change their review over to the PSRO plan. This could mean that in a period of just three or four months hospitals would have three different approaches to utilization review imposed upon them."

Kelsay said even with the original budget the cost of the Oklahoma PSRO program would be significantly lower than the cost experienced in other states. While Oklahoma anticipates a unit cost of between \$8 and \$10 per Medicare-Medicaid claim, said Kelsay, other PSROs are experiencing costs of \$16 to \$18 per claim, and in some instances even higher. □



Governor David Boren tries his hand at CPR as Dr Charles Atkins, President of the American Heart Association, Oklahoma Affiliate, looks on. Governor Boren recently proclaimed 1978 CPR Year in Oklahoma at the request of the Oklahoma State Medical Association. The OSMA and the Heart Association are cooperating in a program to take CPR courses to communities throughout the state. This program is being sponsored on the local level by county medical societies. □



DOCTOR MARGO NEW OSMA PRESIDENT

The new President of the Oklahoma State Medical Association is Oklahoma City orthopedic surgeon, Doctor Marvin K. Margo. Dr Margo is a graduate of the University of Oklahoma College of Medicine and has served as Chief of Staff of Bone and Joint Hospital since 1971. He is a past-president of the Oklahoma County Medical Society, Chairman of the OCMS Medical Center Liaison Committee, and served as OSMA vice-president in 1970. He is married to Bobbie Cravens Margo, and has two sons, Robert C. Margo and Kevin Craig Margo.

New officers elected at the May 3-6 OSMA annual meeting are Dr William M. Leebron, Elk City, president-elect; Dr Floyd F. Miller, Tulsa, vice-president; Dr S. N. Stone, Oklahoma City, speaker of the House of Delegates; Dr George H. Kamp, Tulsa, vice-speaker of the House of Delegates, and Dr J. B. Eskridge, III, Oklahoma City, chairman of the Board of Trustees.

Named as delegates to the American Medical Association are Dr M. Joe Crosthwait, Midwest City, and Dr Harlan Thomas, Tulsa. Dr Rex E. Kenyon, Oklahoma City, was re-elected an alternate delegate to the AMA. □

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Majority of States Now Have HMO's

According to the April 7, 1978, Federal Register, Health Maintenance Organizations have been established and approved in 28 states plus Guam. California has the most widespread use of HMO's with seven plans approved there; Colorado, Illinois, New Jersey, New York and Washington have four plans each.

California

California Medical Group Health Plan, Inc.
Family Health Program, Inc.
Family Health Services, Inc.
Foundation Health Plan
Health Alliance of Northern California
Kaiser Foundation Health Plan, Inc.
Maxi-Care.

Colorado

ChoiceCare Health Services, Inc.
Colorado Health Care Services
Kaiser Foundation Health Plan of Colorado, Inc.
Rocky Mountain Health Maintenance Organization, Inc.

District of Columbia

Georgetown University Community Health Plan, Inc.
Group Health Association, Inc.

Florida

American Health Plan, Inc.
AV-MED, Inc.
Florida Health Care Plan, Inc.

Hawaii

Kaiser Foundation Health Plan, Inc.

Idaho

Gem Health Association, Inc.

Illinois

Anchor Organization for Health Maintenance
HMO Illinois, Inc.
Intergroup Prepaid Health Services
North Communities Health Plan

Indiana

Metropolitan Health Council of Indianapolis, Inc.
Health Care of Louisville
Intergroup Prepaid Health Services

Kansas

Community Group Health Plan

Kentucky

Health Care of Louisville

Maryland

Georgetown University Community Health Plan
Group Health Association

Massachusetts

Harvard Community Health Plan
Rhode Island Group Health Association

Michigan

Group Health Plan of Southeast Michigan
Health Central, Inc.

Missouri

Community Group Health Plan

New Jersey

Central Essex Health Plan
Group Health Plan of New Jersey, Inc.
Health Care Plan of New Jersey, Inc.
Rutgers Community Health Plan

New York

Capital Area Community Health Plan, Inc.
Genesee Valley Group Health Association
Manhattan Health Plan, Inc.
Westchester Community Health Plan

Ohio

Kaiser Community Health Foundation
Marion Health Foundation, Inc.

Oregon

Kaiser Foundation Health Plan of Oregon
Portland Metro Health, Inc.

Pennsylvania

The Health Maintenance Organization of
Pennsylvania
Health Service Plan of Pennsylvania
Penn Group Health Plan, Inc.

Rhode Island

Rhode Island Group Health Association, Inc.

South Carolina

Piedmont Health Care Corporation

Texas

Prudential Health Care Plan, Inc.

Utah

Family Health Program, Inc.

Virginia

Georgetown University Community Health
Plan
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W. K. Warren Receives Award



Named the 1977-78 recipient of the OSMA Public Service Award is W. K. Warren of Tulsa. Warren, an oil executive and philanthropist, organized the Warren Petroleum Corporation in 1922 and served as its chairman of the board and chief executive officer until his retirement in 1961. He is a past-president and member of the International Petroleum Exposition; a member and director of the American Petroleum Institute; past-member of the United States National Petroleum Council; member of the Mid-Continent Oil and Gas Association; founder and past-chairman of the Board of Trans-Western Pipeline Company; recipient of the outstanding Oklahoma Oil Man Award by the Oklahoma Petroleum Council; and a director of the Gulf Oil Corporation.

Warren was presented the second annual award during the OSMA Annual Meeting earlier this month. ☐

Tom Parker Memorial Lecture Will Be May 15

The Department of Neurology of the University of Oklahoma Health Sciences Center has announced the Fifth Annual Tom Parker Memorial Lecture. It will be held May 15, 1978, at 4:00 p.m. in the East Lecture Hall at the Basic Sciences and Education building.

Guest speaker this year will be William DeMyer, MD, professor of neurology at the Indiana University School of Medicine, Indianapolis, Indiana. His topic is "Risk Factors to the Brain During Pregnancy and the Neonatal Period." ☐

Deaths

CHARLES W. ISRAEL, MD 1937-1978

Edmond ophthalmologist, Charles W. Israel, MD, 40, died April 9, 1978. A native of Houston, Texas, Dr Israel was graduated from the University of Southern California School of Medicine in 1962. He moved to Edmond from Dallas, Texas, in 1975. Dr Israel was an ophthalmologic pathologist for the Dean A. McGee Eye Institute. He was a member of the International Academy of Pathologists, the American Society of Pathologists, the American Society of Clinical Pathologists and Phi Beta Kappa.

HERMAN W. FORD, MD 1884-1978

Herman W. Ford, MD, 93, a retired Tulsa physician, died on March 25, 1978. A native of Middletown, Mis-

souri, Dr Ford received his medical degree from Barnes Medical College in St. Louis in 1907. He established his practice in Tulsa in 1917 and retired in 1964. In 1958, the Oklahoma State Medical Association presented Dr Ford with a Life Membership in recognition of his practice of medicine for over a half century.

FELIX R. PARK, MD 1905-1978

A long-time Tulsa physician, Felix R. Park, MD, died March 27, 1978. Born in Milwaukee, Wisconsin, Dr Park was graduated from the University of Michigan Medical School in 1930. He moved to Tulsa from Philadelphia in 1946. Certified by the American Board of Cardiology, Dr Park was a Diplomate of the American Board of Internal Medicine and a Fellow of the American College of Physicians, the American College of Chest Physicians and the American College of Cardiology. He was a Life Member of the OSMA. □



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OSMA Honors Two Tulsa Physicians

C. S. Lewis, Jr., MD, (l), President of the Oklahoma State Medical Association, presents a Certificate of Life Membership in the OSMA to Walter F. Sethney, MD, retired Tulsa pediatrician. A graduate of Columbia University College of Physicians and Surgeons, Dr Sethney entered practice in Tulsa in 1946 after service in World War II. He retired in 1976. Dr Sethney was a major force in the establishment of the Hillcrest Poison Center of Tulsa. The presentation was made at the March 20 meeting of Tulsa County Medical Society.

Linus A. Munding, MD (l), receives a Certificate of Life Membership in the Oklahoma State Medical Association from Dr George H. Kamp, President of Tulsa County Medical Society. Dr Munding retired from active practice in 1977 after 44 years as a Tulsa family practitioner. He is a graduate of St. Louis University School of Medicine. The presentation was made at the March 20 meeting of the Tulsa County Medical Society. □

Medical Supply and Demand

Editor's Note: In December, 1977, the National Commission on the Cost of Medical Care released its controversial findings. This 27-member commission was appointed by the American Medical Association's Board of Trustees and was charged with the responsibility of providing a comprehensive overview of health care costs in this country with possible solutions. The findings of the commission are controversial and have been denounced by some members of the medical profession and praised by others.

The December report listed 48 recommendations which were drawn from the reports of four task forces. These task forces studied supply, demand, technology and the medical marketplace.

The following special to THE JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION features the task force reports on supply and demand. The June Journal will feature the reports of the task forces on technology and the marketplace.

THE JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION neither accepts nor rejects the findings of these task forces, but carries this special report as a service to its subscribers.

Over the past decade, health care policy has focused on methods to expand consumer access to medical care services, and to increase the flow of resources into the health care system. More recently, attention has been directed to the conflicts inherent in any attempt to provide the highest quality care, for the widest population, at the least cost. The reality of resource constraints makes certain trade-offs inevitable.

In an effort to determine how a more appropriate quality-access-cost balance can be obtained, three major supply issues were examined: 1) the aggregate supply and distribution of physicians by specialty and location; 2) the aggregate supply and distribution of health care facilities; and 3) the organization of health care delivery, including the role of group medical practice and the use of allied health personnel.

SUPPLY

Aggregate Supply and Distribution of Physicians

The task force first considered the effect of the current rate of growth of the supply of physicians and their geographic and specialty distribution on health care costs. It is clear that physicians have tended to locate disproportionately in the large urban centers of this country and not necessarily where the need for their services is most acute. In addition, there has been a relative over-emphasis on specialty training and a shortage of primary care physicians.

Geographic Distribution

The task force believes that a dramatic increase in the supply of physicians would substantially increase total health care expenditures with little impact on the disparity of physician location or on the unit cost of medical services. In terms of the potential net benefit to the health of the population, it is more essential to reduce the geographic disparity in the distribution of physicians as rapidly as possible, than to increase the supply.

There are a variety of programs, either currently in effect or in the planning stage, designed to encourage physicians to establish practice in certain geographic areas. Public policy in this area should be designed with a clear understanding of the factors which influence physician location choices. In addition, programs may be directed at different targets, such as the medical student, the medical school, graduate programs, or the practicing physician.

Recommendation

More effort must be devoted to improving the professional attractiveness of service in shortage areas. The development of preceptorship and other rural and inner city training programs would be instrumental in acquainting physicians with medical practice in shortage areas. However, the potential impact of these programs would be limited without an effort to provide an environment and resources that would increase the

number of physicians who remain in an underserved community after such training. For example, this could include: 1) continued development and expansion of area health education centers that have the potential to provide a considerable part of the clinical training and continuing medical education of primary care physicians, dentists, and other health personnel; 2) tax incentives or direct subsidies for the development of group practice opportunities in communities large enough to support such practices; 3) continued development of continuing medical education workshops, and other support services for the rural, typically primary care physician; 4) financial assistance for the acquisition of up-to-date health and medical equipment and facilities in medically underserved communities.

Recommendation

There should be less reliance on current loan forgiveness and scholarship programs as a means to affect physician location decisions. For such a policy to be effective, recipients of government loans and scholarships who default on their service commitment must be required to pay back a substantial portion of the cost of a medical education, rather than the cost of tuition.

Recommendation

If state loan forgiveness programs are established, they should be coupled with admission programs which actively recruit students from rural and other underserved areas. The financial lever alone is insufficient to have a permanent influence on physician distribution. However, the joint effect of admissions and loan policies hold more promise of being successful since students who were raised in a rural environment are most likely to return there to practice.

Specialty Distribution

The specialty choices of physicians have important implications on geographic distribution. Increased specialization has the effect of discouraging physicians from locating in underserved areas which are likely to be some distance from centers of learning and related support facilities. The task force believes that a significant increase in the per-

(Continued on Page 184)



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(Continued from Page 182)

centage of family practice physicians would lead to a more equal distribution of physicians as general and family practitioners tend to respond differently than more specialized physicians to various location forces. The task force believes that an increase in family practitioners can also be expected to result in lower unit costs of medical care, lower physician training costs, and a more appropriate balance between primary and secondary/tertiary care.

Recommendation

There should be an acceleration of the supply of family practice physicians. Such an acceleration could be expected to contribute to the moderation of rising medical costs in two ways: 1) through the substitution of physicians trained in the delivery of primary care for more specialized physicians who are likely to provide more sophisticated and more expensive primary medical services, and 2) through lower training costs for a given supply of physician manpower or, conversely, a larger supply for the same level of costs. In order to achieve this objective: a) federal and state support for the establishment of departments of family medicine, particularly for the recruitment of faculty, should continue in order to accelerate the production of practitioners in family practice and b) federal capitation grants contingent upon meeting primary care residency percentage requirements should continue. However, it is recommended that voluntary efforts be made to develop and expand both undergraduate and graduate programs to educate primary care physicians in numbers that will exceed such requirements.

Aggregate Supply and Distribution of Health Care Facilities

The task force also examined the manner in which the aggregate supply and distribution of health care facilities contributes to cost escalation. Hospital expenditures more than quadrupled between 1965-1976. Adjusted expenses per inpatient day in community hospitals increased from \$40.56 to \$151.79 over the same eleven year period. Factors contributing to this increase include: 1) in-

creased demand for hospital services due to rising incomes and increased insurance coverage; 2) increased labor and non-labor costs in the hospital sector; 3) rapid changes in the nature of the product due to technical innovations which result in more sophisticated and more expensive hospital care; 4) retrospective third-party payment plans which reimburse hospitals on the basis of costs incurred; 5) higher administrative costs resulting from an increasing number of regulatory programs governing the performing of hospitals; and 6) "defensive" medical practices in order to reduce the risk of a malpractice claim.

Two major issues stand out: 1) the potential for developing less costly alternatives to hospital services and facilities, and 2) the issue of underused, duplicative facilities. Concerning the first, analysis indicates that such potential does exist, provided that incentives facing both consumers and providers to use more expensive forms of treatment are removed.

Recommendation

Insurance benefit packages should be adjusted to create incentives for the substitution of less costly alternatives in the provision of medical care. This will require extending health insurance benefits for a reasonable range of services provided outside the hospital, and restricting reimbursement for health care services provided in inappropriate settings. (Utilization review also has the potential to play an important role in this regard.) The task force recognizes that, in the short run, such an adjustment may exert upward pressure on the rate of growth of medical care expenditures. However, the modification of the health insurance benefit structure is expected to create incentives for more efficient utilization decisions by consumers and providers, and a more efficient distribution of inpatient and outpatient facilities.

In addition, the role of the physician as principal decision maker concerning the treatment of a patient's medical condition must be considered. The task force believes that certain changes in the nature of the physician's education and training are required.

Recommendation

Medical schools should develop curricula to

expose students to a variety of health care settings in order to foster recognition of ambulatory alternatives to hospital care.

The second major concern was the issue of underused, duplicative hospital services and facilities. It is apparent that the lack of voluntary cooperation among physicians and institutions to integrate patient care facilities has resulted in increased regulation in the form of certificate-in-need and national health planning legislation.

An alternative solution, to which the task force subscribes, would be to restructure hospital reimbursement to provide incentives for cost consciousness on the part of hospital administrators and medical staffs.

Recommendation

Prospective payment and other incentive reimbursement methods, which create incentives for facilities to be more cost conscious, should be implemented.

In addition, use of the financing system to deal with problems of excess supply and/or a maldistribution of health care facilities should be linked with the objectives of area and state planning agencies.

Recommendation

The concept of certificate-of-need is supported, but there should be continued measurement of the relative costs, benefits and effectiveness; and establishment of equitable techniques for its administration. It is recognized that certificate-of-need programs have the potential for assuring that hospital additions and capital acquisitions are appropriate for community needs.

In addition, the certificate-of-need process should be extended to cover a new facility or service that is being proposed for a noninstitutional setting and that substantially duplicates the facilities or services offered in the institutional setting.

Recommendation

A program which will provide for "decertification" or conversion to other use of facilities found to be excessive to community needs should be implemented. Financial assistance for the modification of inpatient hospital facilities to other health purposes may result in less cost in the long run than con-

tinued maintenance of underused acute care facilities.

Organization of Health Care Delivery

The task force also discussed modifications in the organization of the health care delivery system as it affects the physician's practice. Physicians have always employed and, in varying degrees, delegated patient care services to allied health personnel. However, new and expanding roles of health workers have been established within the last decade. Formal education and training programs for physicians' assistants and nurse-practitioners have been developed on the basis that non-physician personnel can assume a larger amount of preventive, acute, and restorative patient care, and thereby permit physicians to care for more seriously ill patients.

There is widespread agreement within the medical profession that physicians could delegate, without harm to their patients, a number of the tasks they frequently perform. However, most physicians tend to hire less support personnel than is technically and economically feasible. The task force discussed ways to encourage the introduction of efficient, innovative methods in the delivery of medical care.

Recommendation

Modify legislative restrictions regarding the use of allied health professionals under the supervision and direction of a licensed physician who is responsible for the performance of that assistant. There is a wide discrepancy between the number of tasks physicians believe could be delegated to support personnel and the number of tasks physicians actually would delegate. The real or perceived barriers of state medical practice acts contribute to this discrepancy and should be modified.

Recommendation

Present reimbursement systems should be modified to permit appropriate billing by the employing physician for the services of allied health professionals. Pricing policies which do not reimburse for services rendered solely by an assistant in a physician's employ would tend to inhibit more extensive task delegation in medical practice. Such a policy runs counter to efforts to encourage the employ-

ment of physician support personnel by medical practitioners.

DEMAND

The continuing escalation of health care costs results from both the increasing price and utilization of services. Demand plays a significant role in causing prices and utilization to increase. The Demand Task Force defined its task as being: (1) to identify those elements of demand which significantly affect health care costs; (2) to consider possible options which might help in containing those costs or in slowing their increase; and (3) to make recommendations. This report sets forth the task force response to that outline.

Those elements of demand which affect health care costs are (1) the decisions of the patient or his family; and (2) the utilization recommendations and decisions of the provider. In turn, the factors affecting patient and provider utilization decisions are: (1) the characteristics of providers and the extent to which providers are reinforced in their practices to accept the concept of cost effectiveness as an element in quality care; (2) the current third-party financing system which does not generally create incentives for patients and providers to utilize health care in a cost-effective manner; and 3) the availability and accessibility of health care services as well as the quality and cost-effectiveness of those services.

In order to contain costs, three major approaches are necessary: (1) to assist and create incentives for consumer/patients to make better, more cost-effective utilization decisions; (2) to create incentives for providers to make cost-effective, quality utilization recommendations and decisions; and (3) to make cost effective, quality sources of care readily available and accessible to consumers and providers.

Assistance and Incentives to Consumers

Consumers should be provided with incentives and assistance in making cost-effective utilization decisions.

The prevailing system of financing health care has contributed to the increased utilization and cost of health care services. The in-

creased utilization of health care that resulted from increased third party coverage and the design of benefits over the last three decades should not be viewed as being totally undesirable; having enabled many persons to receive needed medical care. However, methods to structure the financing of health care to influence persons to demand health care in a cost-effective manner and in cost-effective settings should be developed.

Recommendation 1: Consumer Cost Awareness

Encourage consumer (and provider) awareness of costs through an appropriately designed system of health insurance in which the consumer shares in the cost of the care received, for selected benefits and for selected consumer groups, and through employee sharing of group premium costs.

Recommendation 2: Utilization in Appropriate Settings

Encourage adjustment of private and government insurance benefit structures so that incentives are provided to utilize care in the most appropriate settings from the standpoint of both quality and cost, e.g., incentives to utilize outpatient rather than inpatient, acute care facilities, especially for those procedures that are presently being performed on an inpatient basis even though they could be performed with equal quality at lower cost on an outpatient basis.

Assistance to Consumers

It is also important to provide assistance to consumers in making knowledgeable and cost-effective utilization decisions.

Recommendation 3: Consumers as Knowledgeable Decision-Makers

Encourage programs to assist consumers and patients in becoming more active and knowledgeable participants in making health care utilization decisions.

Develop and regularly update directories of hospitals and physicians, at the state or HSA level, with participation being voluntary, and containing information relevant to consumer choice.

Encourage the development of health and patient education programs that inform consumers and patients about the costs and ben-

efits associated with potential and alternative courses of treatment.

Emphasize self-help education programs directed at well and worried well individuals and groups to provide consumers with the information necessary to make the initial decision as to whether or not provider care is necessary, or whether there are other alternatives open to them.

Reduce Need for Health Care

Adjusting utilization to effect cost containment in health care may also be possible in the long-term through the reduction of the need for services by: 1) the prevention and long-term reduction of the incidence of illness through the development of more healthful lifestyles; and 2) the early detection of incipient conditions permitting treatment through lower cost therapy than that required for advanced illness. Health education programs can provide assistance in achieving these goals.

Recommendation 4: Healthful Lifestyles and Preventive Care

Encourage programs to educate and motivate consumers to adopt more healthful lifestyles, including proper nutritional information and counseling.

Explore methods of utilizing the public communications media more effectively in education efforts directed towards motivating consumers to adopt healthful lifestyles; and

Educate consumers to utilize preventive health care services and screening which would permit the prevention or early detection and treatment of illness.

Incentives for Providers

Providers affect demand and utilization as they make utilization decisions on behalf of their patients. What is called unnecessary or excess care in this report is sometimes utilized. Examples include procedures that are: not medically necessary; duplicative; without intrinsic medical merit; consisting of expensive amenities; or appropriate but not reasonably cost-effective. Diagnostic tests for a given patient are often duplicated among providers, some unnecessary procedures are performed because of defensive medicine, and there is evidence concerning the existence of some unnecessary elective surgery. Methods

should be developed to assist and encourage providers to make cost-effective utilization recommendations and decisions as part of provider quality care.

Recommendation 5: Cost-Effective Medical Practices

The medical profession with third party payers, should examine those medical practice patterns which appear to lead to the utilization of excess care and identify those medical practice patterns that lead to utilization of appropriate care.

Providers, working at the local level, should develop mechanisms for the sharing of diagnostic findings for a given patient among providers.

Third-party payers, working with providers, should undertake conscientious evaluation of the methodologies and the results of current experimentation with coverage of second opinions prior to surgery. The long-term results and general adaptability of such programs should be evaluated in terms of: medical care quality; cost-effectiveness; the cost and quality of alternative care provided instead of the surgery; and the long-range medical implication for the patients who did not have the surgery.

Providers and the courts should utilize standards of appropriate care, based on considerations of quality, medical necessity, and cost effectiveness, (see Recommendation 6A) as guidance as to what constitutes acceptable levels of performance on the part of physicians and other providers. Providers, courts, and state legislatures should adopt procedures to discourage unjustified or casual malpractice suits. These procedures should not at the same time impede suits where actual malpractice has occurred.

For example, many states have already enacted legislation requiring a mandatory pre-trial screening panel hearing.

There are factors other than medical judgment which can impact on provider decisions. For example, a patient's financial means or type and extent of insurance coverage can influence choice of treatment as the provider considers both the patient's financial well-being or convenience and the provider's convenience or desire to be paid for his services. Further, providers often are not aware of the cost-producing implications of their recommendations.

Recommendation 6: Incentives to Provide Cost-Effective Care

Create incentives for providers to make cost-effective utilization recommendations and decisions.

On the basis of peer review criteria and findings, the medical profession, preferably through its specialty societies, should develop and disseminate standards of appropriate care based on criteria of medical necessity, quality, and cost-benefit. These criteria should be sufficiently detailed and explicit to permit clear identification of departures from them. These departures should be individually considered and the medical appropriateness of such departures justified.

Educate providers about the cost implications of alternative treatment modalities and referral decisions.

The medical profession, working with third-party payers, should explore ways of, putting providers at risk for at least part of the excess care resulting from their utilization decisions as indicated by unacceptable departures from the established standards relevant in a particular instance. The provider, rather than the patient or third-party payer, should bear the costs of decisions which result in excess care, and should be rewarded for cost-effective decisions.

For example, base third-party payment to the provider on medical diagnosis so that the provider is paid a flat rate for treating an entire illness episode. Such a program, is exemplified by a pilot program being tried by Pennsylvania Blue Shield.

Health Maintenance Plans (HMPs) are also an example of a program which places the participating physicians at risk for part of the cost resulting from their recommendations. Instituted in 1972 by the Wisconsin Physicians Service and Blue Shield, the program has resulted in reduced utilization.

Excess capacity within the system (e.g., where hospitals are experiencing low occupancy rates, duplicate technology exists, or there is an extremely high concentration of professional personnel generally or by specialty) has been shown to be related to higher utilization rates. Adjusting the facility or manpower capacity within a community may bring about a more strict evaluation by the provider of the need for the use of such ser-

vices as hospitalization or referral to specialists.

Recommendation 7: Incentives to Adjust Institutional and Manpower Capacity

Adjust supply capacity so that unnecessary utilization of services is discouraged.

Develop regional standards based to determine what health personnel and facilities are required in various geographic areas, and develop programs for matching available personnel and facilities with such standards.

Provide incentives to hospitals to adjust bed capacity according to realistic estimates of community rather than perceived individual hospital needs.

Utilization review is another method of containing costs by encouraging cost-effective decisions by providers, and enlisting the desire of providers to learn from peer experience and to be viewed favorably by their peers.

Recommendation 8: Utilization Review

Encourage providers to make cost-effective utilization decisions through the development and dissemination of utilization review data.

Extend utilization review to both institutional and office-based ambulatory care settings.

Develop a mechanism for channeling review information to providers on the efficacy and cost-effectiveness of alternative treatment modalities and treatment patterns.

Use review results as a medical education device.

Ensure linkage of review results with certificate-of-need, planning and development, and other governmental planning and regulatory activities.

Availability of Services

In order for consumers and providers to utilize cost-effective, quality health care, such services must be accessible and available. Consumers should also be encouraged and be able to deal with a single and regular source of primary care, to allow the coordination of fragmented specialist care and the continuity of total care. Professional preventive care and early detection screening services that may lower the incidence or result in the early treatment of illness can be utilized only if they are readily available.

Recommendation 9: Primary and Preventive Care Services

Ensure the availability of those types of services which will enable consumers to utilize care in the most cost-effective manner.

Encourage programs that will make available 24-hour-a-day, 7-day-a-week primary ambulatory care, preferably in settings other than the hospital emergency department.

Encourage the development of policies and mechanisms that lead to the continuity, coordination, and continuous availability of patient care, including professional preventive care and early detection screening services.

Government financing of health care for the disadvantaged has contributed to the increased utilization and cost of health care. While the task force believes that it is desirable to reduce health care costs by appropriate modification in the design of the system of health care financing, it strongly supports the equitable provision of financing for health care to financially disadvantaged groups. □

Book Reviews

Viral Infections of Human: Epidemiology and Control. edited by Alfred S. Evans. 584 pages, New York, Plenum Medical Book Company, 1976, Price \$39.50

Despite the presence of several textbooks on viral diseases, this book is a welcome addition. Most such books are written from either a clinical or laboratory point of view. This book adds an epidemiologic perspective of the most important viral infections of man. It contains 25 chapters prepared by 35 authors. Its organization and evenness denote a good editorial job.

The first two chapters by Dr Evans introduce epidemiologic concepts and review general epidemiologic and pathophysiological principles. Both are well written. These are followed by chapters on the individual viruses or groups of viruses that constitute clinical and public health importance. After these 19 chapters, which are alphabetically arranged, are four chapters which discuss Burkitt's lymphoma, cancer of the cervix, chronic neurologic disorders and nasopharyngeal carcinoma in relation to a viral cause. Each chapter on a specific viral disorder is divided into an introduction and sections on historical background, methods for study, virus characteristics,

epidemiology, transmission, pathogenesis, immunity, host response, control and prevention. Epidemiologic aspects are emphasized with separate sections for sources of mortality and morbidity data, incidence, prevalence, geographic and temporal distribution, age and sex. In most instances, clinical and laboratory aspects will wish supplementation. Welcome additions to most chapters are those outlining unresolved problems and suggested further reading. Excellent bibliographies are present for each chapter. While there are no free-standing chapters reviewing certain important topics such as perinatal, nosocomial and viral infections of the immunodeficient host, the index will prove useful to the reader who wishes to pursue these topics. There is no specific discussion of diseases of suspected but unproved viral etiology such as cat scratch disease, erythema infectiosum and certain others.

This volume offers an excellent overview of virology for those who already have general knowledge of this field. It is obviously intended primarily for the epidemiologist and public health worker, rather than for the laboratory or basic virologist.

If the book has any limitations, it is the absence of any systematic discussion of classification of viruses, a confusing field for most readers.

The tables and graphs are generally well done and the book is well printed. A unique feature is the fact that only two photographs are included, undoubtedly the result of an attempt to hold down the price.

Overall, this book is filled with valuable information presented in a scholarly fashion. It can be recommended. *Harris D. Riley, Jr., MD*

The Professor, The Institute and DNA. Rene J. DuBos, Rockefeller University Press, New York, 1976, 238 pages, \$14.50.

This is an interesting book. It has two heroes — the first is Oswald Theodore Avery and the second is the Rockefeller Institute. A biography of Avery, a remarkable scientist, is indeed welcomed.

"Fess" (short for professor) Avery devoted most of his professional career to the study of the pneumococcus, during which he made several discoveries of the utmost significance concerning the chemical basis of biological specificity. In 1923 with Michael Heidelberger,

he showed for the first time the antigenicity of the polysaccharide in the pneumococcus capsule which was the first demonstration that substances other than protein possessed specificity. In the pre-antibiotic days the antiserums Avery helped to develop against several types of capsular polysaccharides were a major means of treating pneumonia. In 1944 after a highly productive career, Avery with Colin MacLeod (formerly of Oklahoma City) and Maclyn McCarty showed that DNA possessed genetic specificity by proving that it was the substance responsible for hereditary transformation of capsular type. This finding opened the rush for the double helix. Despite the importance of these discoveries, Avery was never awarded a Nobel Prize.

"Fess" Avery was a bachelor whose entire life revolved around his scientific work and his family. While he could be socially attractive, he was ever protective of his privacy as it related to his professional work. Despite acquisition of numerous honors in college as a public speaker, he avoided situations in which he was expected to give lectures and refused honors when they would take him from his laboratory. His approach to teaching was to discuss with his colleagues and those working with him a particular problem and slowly but surely get them involved in the question at hand. Some of his "boys," as he called his trainees, have become among the most important names in medical research and science.

In 1948, Dr Avery left the Rockefeller Institute and went to Nashville and Vanderbilt University. There he had the opportunity of being associated for the first time professionally with his brother, Dr Roy C. Avery, a microbiologist famous in his own right. During that period, this reviewer had the privilege of knowing him. Despite his widespread reputation of being extremely reserved and in fact withdrawn, he was found to be a delightful conversationalist who had interest in many things. He died at the age of 78 of primary carcinoma of the liver and is buried in Nashville.

In May 1943, he confided in a letter to Roy Avery his findings about the role of DNA as a carrier of genetic information, the first written description of these findings (other than an annual Institute report prepared slightly ear-

lier). This letter is reproduced in an appendix of the book.

The Rockefeller Institute proved to be a perfect place for a person with the talents of Avery. He flourished in the medically oriented but strictly scientific atmosphere of the Institute. The author, DuBos, was a member of Avery's department at the Institute for some 14 years and is well-equipped to write this book. He does so with a sympathetic and wise understanding of this unusual person.

A biography of Avery is welcome. *Harris D. Riley, Jr., MD*

The University of Texas Southwestern Medical School: Medical Education in Dallas, 1900-1975. John S. Chapman, 128 pages, Dallas Southern Methodist University Press, 1976, Price \$10.00.

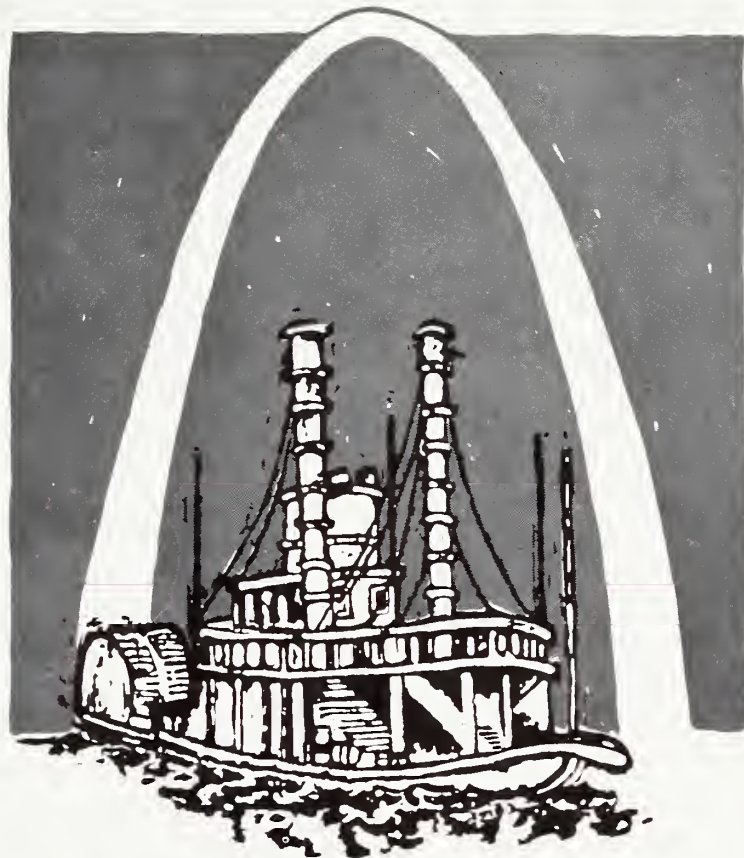
John Chapman has written a thoughtful analysis of medical education in the Dallas, Texas area. Although the focus of the book is the internal development of the Southwestern Medical School of the University of Texas system, it encompasses more than this. He has clearly depicted the origins of medical education in that area in the context of the social and political background.

The book is divided into nine chapters. Most concern a particular period in the development of the medical school. The book begins with an interesting picture of the Dallas scene in the early 1900's. In 1900, the first identifiable medical school in Dallas, the University of Dallas Medical School, was incorporated and Dr E. H. Cary was appointed dean in 1901. A large part of the remainder of the book describes his vision and accomplishments. He arranged the affiliation with the Baylor Medical College in 1903 and with the Parkland Hospital, the city-county hospital, in 1913. Chapman describes well the Dallas community and the poor state of medical education — as well as general education — in Texas at the turn of the century.

Although Carey resigned in 1920, he continued to play a major role. He chartered the Southwestern Medical Foundation in 1939 to secure funds for medical education.

The foreward states "in the recent quarter of a century what amounted to no more than a dream of 50 years — and a disgruntlement — has become a major professional school. The

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Legal Briefs

Statute of Limitations in Malpractice Claims

Oklahoma law provides that "an action for damages for injury or death against any physician . . . shall be brought within two years of the date the plaintiff knew or should have known, through the exercise of reasonable diligence, of the existence of the death, injury or condition complained of; provided any action brought more than three years from the date of the injury shall be limited to actual medical and surgical expenses incurred or to be incurred as a direct result of the injury, provided, however, that minority or incompetency when the cause of action arises will extend said period of limitation." Let's dissect this one step at a time.

First, a patient or his appropriate survivor has two years from the date he knew or should have known of the incident complained of to sue the physician for general damages. Encompassed within the term general damages are claims for such items of relief as pain and suffering, disfigurement, lost wages, decreased earning capacity, mental anguish and past and future medical expenses. As a general rule, the statute of limitations starts to run as of the date of the surgery, alleged misdiagnosis or whatever the specific incident complained of may have been. The "knew or should have known" portion of the statute should be emphasized, however, because we have encountered situations where patients wait more than two years from the incident complained of and attempt to counter our efforts to dismiss the case due to the running of the statute of limitations by contending that they did not and could not reasonably have discovered the incident complained of on the day that it happened and that suit was brought within two years from the time they discovered it or reasonably should be held to have discovered it. A related situation is where the patient has attempted to sue a physician (usually an anesthesiologist) more than two years after injuries were received during an allegedly

negligent surgery and claims that he did not discover his identity until sometime after the surgery and that suit was brought within two years of the discovery of his identity. It is our position that the statute of limitations for general damages has expired because the statute states the action must be brought within two years of the date the plaintiff discovered the injury or condition complained of and not two years from the date of the discovery of the identity of the allegedly negligent physician. In other words, the statute runs from the date of the harm done and not the date of the identification of the alleged perpetrator.

Another facet of the statute provides that if a patient sues within two years from the time he discovered the injury complained of but suit is filed more than three years from the date of the incident the patient may no longer sue for general damages but is limited solely to past and future medical expenses. An example of this would be a patient who has surgery on January 1, 1978 and on December 1, 1980 has an x-ray taken that reveals for the first time a clamp that was left in his belly. This means that the patient has two years from December 1, 1980 or until December 1, 1982 to file suit against the surgeon; however, if he waits until after January 1, 1981 he will be limited solely to the recovery of medical expenses.

The final provision of the statute provides that if the patient is an incompetent or a minor, he shall be entitled to commence suit within one year after competency is restored or adulthood is reached at eighteen years of age. This means that since the statute of limitations is tolled or frozen in the interim a five-year old patient has until his nineteenth birthday to sue for all items of general damages earlier described. This type of situation where a physician has exposure to a claim for several years points out the need for complete and accurate records, which will be discussed in a later article. □

SHORT, BARNES, WIGGINS and MARGO

SUMMER SHORTS

- Generic-equivalent drug substitution is moving right along in the inevitable directions. Last month one of my patients was informed that ampicillin was the same thing as amoxicillin. Another was told that erythromycin stearate was the same as erythromycin esolate. They both had gastrointestinal side-effects which did not accompany the subsequent use of the prescribed drug. A third patient accepted "the very same medicine at quite a saving." The "saving" to the patient was about ten percent in spite of the fact that "the very same medicine" cost the pharmacist about one-fifth as much as the brand prescribed. Maybe we do need a drug-substitution law. A very explicit one.

- I am waiting — but fortunately not breathlessly, for the United States Supreme Court to announce its decision in the Bakke case. As simple as I am, I can't understand the delay. It seemed from what the media described, a clear-cut question: Do the rights of the members of one minority supersede the rights of the members of another minority or the rights of the members of the majority — whatever that is? But I'm sure it's a much more complicated matter than it seems. Or maybe the justices are deliberating through the mails.

- No doubt Mr. Califano, in his zeal to keep the public informed about where his eighty-five billion dollars are going this year, is planning to publish a list of the names of all recipients of his checks and the amount of money each receives. Personally, I want to know and the law says I have a right to know. But I won't

be waiting breathlessly for this bit of information, either.

- Insurance companies continue to send me requests for additional information about my patients' claims. They are totally bewildered by the terms "complete history and physical examination," "professional services," "routine follow-up examination," and such. They say they must know what services were rendered, where they were rendered and what date they were rendered. Of course a copy of my statement goes along with each claim. It bears my name, address, zip code, phone number and type of practice. Each service rendered is named and each rendering is dated with the appropriate day, month and year. But still, I must be doing something wrong. Couldn't be just a stall, surely.

- President Carter's impetuous scolding of the AMA exempted many of its individual members from his charge of selfishness. He indulged in what might be termed a sweet-and-sour poke but failed to cite a model, unselfish organization which the AMA should emulate. His earlier castigation of lawyers seemed to disqualify the ABA. Perhaps the AMA should strive to purge itself of selfishness as have the Democrat and Republican parties, the United Mine workers, the American Federation of Government Employees and the American Postal Workers Union. Since none of these has been endowed with our President's public scorn, we can, perhaps, presume he considers them unselfish.

- Stay out of the sunshine. It causes cancer, you know. Otherwise enjoy the summer.

MRJ

When I agreed to serve as President of the Oklahoma State Medical Association, I knew that I was assuming a difficult job and that I would be opening myself to criticism. No one working with an organization as large and as complex as the



medical association can expect to please all the people all the time. I fully expected to be criticized by people and organizations who do not fully understand the goals and objectives of the medical federation, and I assumed that there would be times that our positions and those of the federal government would not coincide. I did not, however, expect the criticism and the cross purposes to begin quite so quickly.

Last month on the evening of the OSMA Inaugural Ball I was still looking forward to my new position and wondering what it would be like. The answer came quickly as I was informed that a camera crew was outside waiting for a reaction to President Carter's attack on the American Medical Association and medical organizations in general. I knew the President had attacked the legal profession the day before, but his comments about medical organizations were unexpected.

The complaint: Medical associations, namely the AMA, are more interested in promoting the self interests of their members than in caring for the needs of the public. The facts: Simply not true!

Like most people, Mr. Carter's attack caught me by surprise, and for a moment I was almost convinced. After all, medical organizations are made up of doctors and they are financed by the dues we pay. It didn't seem unlikely then, that these organizations would spend a majority of their time and resources promoting the interests of their members. A quick look back on the previous three days, however, soon convinced me that this was simply not the case. The very meeting that I was attending was proof in itself that medical organizations do

care about the public and do act in their best interests.

Regardless of the position you take on continuing medical education it is not difficult to identify the patient benefits which are inherent in such a program. Our association has committed a great deal of time and attention to CME in the past three years, not because it is in our personal interests, but rather in an effort to make us better doctors and to help us deliver better patient care. In fact, our annual meeting was replete with programs designed to help the public.

For example, physicians once again voted to support comprehensive health education in an effort to combat the increasing incidence of teen-age pregnancies, drug abuse, etc. This time, however, we went one step farther, volunteering physician assistance in teaching these programs. We also voted to continue support of the OSMA/American Heart Association cardiopulmonary resuscitation training program . . . not because it benefits us, but because it benefits the citizens of this state. We heard an update on the Oklahoma Utilization Review System which saved taxpayers approximately \$15 million last year. We received updates from the Maternal Mortality Committee, the Perinatal Task Force, and the new OSMA Environmental Quality Committee. Our Peer Review Committee reported on its ever-increasing activities, and our House of Delegates once again committed itself to finding solutions to Oklahoma's rural health manpower problems.

And this year's meeting is the rule, not the exception.

Last year our state association took firm stands on controversial questions such as the use and administration of Laetrile, the prescription of Human Chorionic Gonadotropin, plus a number of other topics which required our attention. We did this not because it was expedient, but because it was something which needed to be done. The list of programs and activities which we conduct in the interest of the public is endless. Mr. Carter's statements are simply untrue.

I am confident that an unbiased examination of the facts will prove that President Carter's remarks were untrue, uncalled for and unprofessional.

Marvin K. Margo M.D.

Maternal Mortality in Oklahoma

Hemorrhage Remains a Problem

STEVEN D. JIMERSON, MD
WARREN M. CROSBY, MD

Maternal mortality rates have decreased drastically over the past three decades. A review of recent trends in Oklahoma shows there is still room for improvement, especially in the areas of hemorrhage as a cause of maternal mortality.

INTRODUCTION

Maternal mortality in Oklahoma has been reviewed twice during the past 25 years. In 1951, Green reported that toxemia had replaced sepsis as the leading cause of maternal death¹ and by 1965, hemorrhage assumed the leading position². As a result of the latter report, the Maternal Mortality Committee made a recommendation to the State Health Department to upgrade the availability of blood for parturient women. This review shows that

blood is now generally available in Oklahoma hospitals but, contrary to national trends, hemorrhage remains the leading cause of maternal death.

METHODS

Each maternal death is identified by the Oklahoma State Department of Health. Upon identification that a death has occurred during or within 28 days of pregnancy, a questionnaire is sent to the physician who signed the death certificate to further elucidate the medical details surrounding the death. The questionnaire and other submitted records are altered to provide anonymity, and copies of the altered records are sent to the Maternal Mortality Committee, a permanent committee of the Oklahoma State Medical Association. The chairman of the committee assigns each case to a committee member who reviews the records, summarizes the case and makes recommendations to the committee regarding the probable cause of death, the preventability of the death, and, if thought to be preventable, an assignment is made as to the parties responsible for the death. The committee meets twice annually to discuss each case individually and to classify them officially. The defined classifications include:

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Obstetrical or Non-Obstetrical Death: An obstetrical death is one that would not have occurred if the patient had not been pregnant. Direct obstetrical deaths are those in which the death is clearly due to an obstetrical condition such as pre-eclampsia or amniotic fluid embolism. An indirect obstetrical death is one in which the death was due to a disorder that preceded the pregnancy, but which was aggravated by the pregnant state, such as valvular heart disease, severe hypertension or diabetes mellitus. Non-obstetrical deaths are those that would have occurred whether or not the patient was pregnant, such as accidental death.

Because hemorrhage remains a significant threat to every pregnant woman, and because there was evidence that some of the maternal deaths herein reported apparently died because blood was not available quickly enough or in enough quantity where the death occurred, we attempted to assess the availability of blood in Oklahoma hospitals that reported obstetrical deliveries during 1975. Hospital laboratories were contacted by telephone and the technician on duty (usually during normal working hours) was asked the following questions:

"What is the minimum amount of blood that your hospital usually keeps on hand?" "Where is the blood stored until used?" "How many units of blood do you now have on hand?" "What is the distribution of major and Rh types of the blood on hand?"

RESULTS

Table I shows the number of live births, the number of maternal deaths due to obstetrical causes, and the official maternal mortality

TABLE I
Total Live Births and Maternal Deaths
in Oklahoma 1965-74

Year	Live Births	Maternal Deaths	Official Rate/100,000 (obstetric deaths only)
1965	42,806	15	35.0
1966	39,993	7	17.5
1967	40,102	12	28.5
1968	40,973	11	26.9
1969	42,737	15	35.1
1970	44,991	12	26.7
1971	45,353	10	22.1
1972	42,303	20	47.3
1973	40,765	8	19.6
1974	42,363	10	23.6

TABLE II
Maternal Mortality
(99 obstetric deaths)
1965-1975

Causes of Maternal Deaths	Individual Numbers	Category total
1. Hemorrhage		31
Post-Partum	11	
Rupture of uterus	9	
Ectopic pregnancy	7	
Other	4	
2. Sepsis		22
3. Pulmonary embolus		13
4. Other		10
5. Toxemia		8
6. Anesthetic		8
7. Heart Disease		4
8. Amniotic fluid embolism		3

rates for the ten-year period reviewed. Linear regression analysis shows no significant decline in the maternal mortality rate for the ten-year period. The average rate in Oklahoma for this period was 28.3 deaths per 100,000 live births. The total number of live births per year has remained relatively stable. Table II tabulates obstetrical deaths reviewed by the committee and shows that hemorrhage remains the leading cause of maternal death in Oklahoma. It is of some importance that toxemia is no longer among the top three causes of maternal death, as it has been in the past. Of the 99 deaths which were felt to be due to obstetrical causes, this retrospective analysis showed 90 were direct and nine were indirect.

The findings of the committee with regards to preventability and responsibility for the death are summarized in Table III. Table IV shows preventability by cause and reveals that the largest number of deaths judged preventable were those caused by hemorrhage. Table V shows the percentage of deaths associated with various factors which are not listed as the cause of death. Although 16 of the deaths were associated with the use of oxytocin, in only three was the death felt to be directly related to its inappropriate use. There were five deaths directly related to the religious beliefs of the patient or her family.

TABLE III
Preventability and Responsibility as Assessed
by the Committee in the 99 Obstetrical Deaths

Judged Preventable		73
Physician responsibility	53	
Patient responsibility	24	
Other	5	
Preventability Not Assessed		2
Judged Non-Preventable		24

TABLE IV
Preventability by Cause
Fraction Judged
Preventable

1. Hemorrhage	28/31
2. Sepsis	17/22
3. Pulmonary Embolism	6/13
4. Other	4/10
5. Toxemia	8/8
6. Anesthetic	8/8
7. Heart Disease	2/4
8. Amniotic Fluid Embolism	0/3

From the 99 obstetrical deaths, there were 39 surviving infants. Seven post-mortem cesarean sections were attempted, with one infant surviving. Sixty-one of the maternal death cases were autopsied.

In 1975, there were 42,704 reported obstetrical deliveries in 131 Oklahoma hospitals. (Table VI) The telephone survey indicated that there were 13 hospitals that had no blood on hand and indicated that there was no blood-banking facility in the community. There were seven other hospitals that reported having some blood on hand, but the distribution of blood types was not sufficient to quickly administer two units of theoretically compatible blood (ie, blood that is type-specific blood and would not be expected to produce a major transfusion reaction. In practice this means having two units of type O blood on hand). These 20 hospitals were classified as having an "inadequate supply of blood." In addition, there were 48 hospitals that had two or more units of type O and other types of blood on hand, but couldn't have met the specific needs of a type B or any Rh negative recipient. These hospitals were classified "marginally adequate" in that they could administer two units of theoretically compatible blood in a life-threatening situation, but at the significant risk of sensitizing the 15% of the population that is Rh negative, or causing potentially serious reactions from the anti-A and anti-B antibodies in type O blood. In addition, they could not have offered safe blood transfusions to any isoim-

TABLE V
Other Factors Associated With Maternal Death

Oxytocin use	16%
(inappropriate use)	(3%)
Prolonged rupture of membranes	8%
Abortion	8%
Ectopic pregnancy	7%
Religious prohibitions	5%

TABLE VI
Availability of Blood in Oklahoma Hospitals
(1975 Telephone Survey)

Available Blood	Hospitals	Deliveries	% Total Births
"Inadequate"	20	952	2.2
"Marginal"	48	5,482	13.5
"Adequate"	63	36,270	84.3

munized Rh negative recipient. Those "inadequate" or "marginally adequate" hospitals reported 952 and 5482 deliveries respectively, 15.7% of the state's total in 1975.

Because of the anonymity maintained by the investigation process, the distribution of deaths cannot be related either to geographic area or to the availability of blood. Of the 131 hospitals reporting obstetrical services, 59 reported less than 100 deliveries during 1975. Of these 59, only five had an "adequate" blood administration capability as outlined above.

COMMENT

Maternal mortality has decreased steadily for the nation and Oklahoma during the past 35 years. Analysis of the data for the last ten years shows that Oklahoma has lagged behind the nation in this decline. (Fig 1) The mean mortality rate for Oklahoma (28/100,000) is approximately twice that of the nation (16/100,000) for the past five years. Oklahoma ranks 41st among the states in maternal mortality.³ Maternal deaths from all causes

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A 1957 graduate of the Kansas University School of Medicine, Warren M. Crosby, MD, is professor and vice-chairman of the Department of Gynecology and Obstetrics at the University of Oklahoma Health Sciences Center. Among his medical affiliations are the Alpha Omega Alpha, the American Association of Obstetricians and Gynecologists, the International Society for the Advancement of Humanistic Studies in Gynecology and is a Diplomate of the Maternal Fetal Medicine Division of the American College of Obstetricians and Gynecologists.

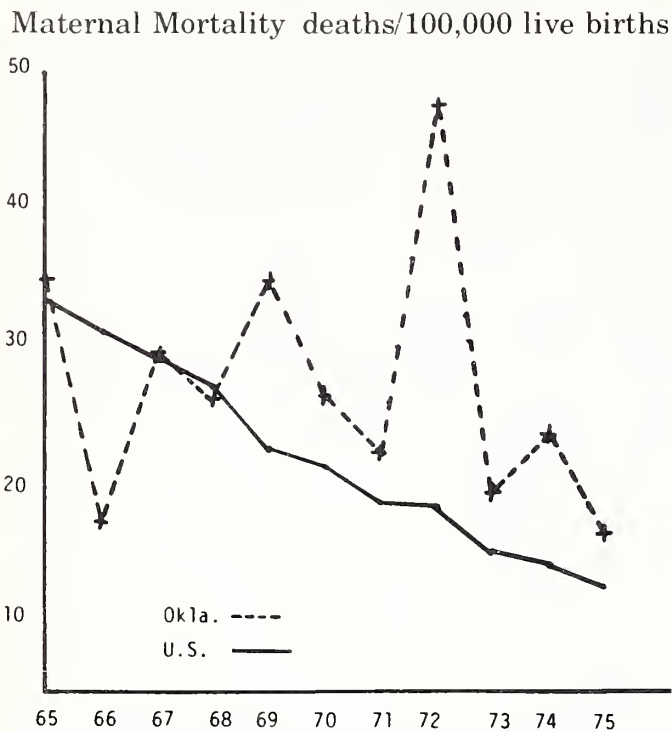


Figure 1. Annual maternal mortality rates, Oklahoma and US, 1965-1975

have decreased steadily, but the varying rate of change has caused some shifting in the relative positions as the leading causes of death. Nationally, hemorrhage was the most frequent cause of death from childbirth during the 1950's, but had decreased to third place by the 1960's. Oklahoma closely paralleled this trend, except that hemorrhage has maintained its leading position. It is interesting that in Oklahoma, traditionally classified as a southern and rural state, toxemia has dropped out of the three leading causes of maternal death and has been replaced by pulmonary embolus. It may also be the rural nature of Oklahoma that is responsible for the large number of preventable deaths due to hemorrhage. In reviewing the committee's comments concerning deaths due to hemorrhage a frequent observation is that the treatment instituted was "too little, too late."

There were four deaths in hospitals where it appeared clear that the death occurred because of the lack of blood in the hospital or the surrounding community. In 1975, the maternal mortality rate for Oklahoma was 15.7/100,000 live births. By way of comparison, in 1974 the maternal mortality rate in New York state, exclusive of New York City, was 20/100,000 live births. In that state, embolism and anesthetic accidents are the leading causes of death, and that study concluded that the induction of labor or stimulation of labor was involved in 31 of 134 maternal deaths analyzed⁴.

In Texas, Gibbs and Locke⁵ reported 501 consecutive maternal deaths between 1969 and 1973. During this period the maternal mortality rate was 45/100,000 live births. Hemorrhage, including rupture of the uterus and ectopic pregnancy, accounted for 111 of the direct obstetrical deaths, toxemia accounted for 74, infection for 65 and anesthesia and amniotic fluid embolism combined accounted for 37 of the deaths.

Data from our telephone survey indicated that none of the smaller hospitals whose blood replacement facilities we termed "inadequate" is further than 50 miles from a hospital with more adequate facilities. Twelve of these 20 hospitals delivered less than 50 babies a year, and only one had more than 150 obstetrical cases in 1975. With such small demand, it is no doubt fiscally unsound to provide an appropriate and continuous supply of blood for those few women who might need it. But it is impossible to predict in whom hemorrhage will occur and the need, while rare, is life endangering when unmet. With the availability of adequate (although minimal in some cases) blood replacement facilities within an hour's drive, we feel that consolidation of these obstetrical services into units large enough to justify adequate supplies of blood would be helpful in reducing the maternal mortality in Oklahoma.

We recognize that most hemorrhage during pregnancy is not life-threatening, and that a delay of a few hours is not ordinarily crucial. We also recognize that the need for immediate availability of blood may not arise in a small hospital for several years. However, we are here reviewing maternal deaths, many of which might have been prevented by the more immediate availability of larger quantities of blood. It seems a small price to pay for a community to provide such minimum resources in exchange for increased safety in parturition. Since it is apparent that individual hospitals and the communities and physicians they serve have not responded to this need, we again suggest that the State Health Department, with its hospital licensing function, accept the responsibility for improving the availability of blood in those Oklahoma hospitals which desire to continue offering obstetrical services.

SUMMARY

Oklahoma has not kept pace with the nation in the decline of its maternal mortality rate.

Hemorrhage remains a significant problem and this problem is out of line with the national trend. The majority of maternal deaths in Oklahoma appear to be preventable within the present "state of the art." Since hemorrhage remains the leading cause of maternal death, suggestions are made to reduce this major risk to the pregnant women of Oklahoma. □

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FAMILY MEDICINE CONTINUING EDUCATION SEMINAR No. 2

July 29, 1978

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"Patient Compliance"
"The Allergic Patient"

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"Transient Ischemic Attacks"
"Peripheral Vascular Disease: Pre-Operative and Post-Operative
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Prevention of Meconium Aspiration Syndrome in Newborn Infants

DAVID A. KALLENBERGER, MD
MARY FRANCES BLOCK, MD
MARY ANNE McCAFFREE, MD

Meconium aspiration syndrome is responsible for significant neonatal morbidity and mortality and can largely be prevented by attention to proper techniques in the delivery room.

Meconium aspiration syndrome (MAS) is a variety of aspiration pneumonia which occurs in newborns who have passed meconium in utero. Recent reviews of the incidence and pathophysiology of this syndrome have appeared in both obstetric and pediatric literature. Meconium aspiration syndrome is a frequent cause of neonatal mortality and morbidity which can largely be prevented with proper management by the obstetrician and pediatrician.¹ This syndrome, its treatment and prevention, should be understood by all physicians treating obstetrical patients. This article will discuss the pathophysiology of meconium aspiration, the proper management for prevention, and treatment when it occurs.

From the Department of Gynecology and Obstetrics, Department of Pediatrics, Division of Neonatology, University of Oklahoma College of Medicine.

PATHOPHYSIOLOGY

Light yellow-green meconium is present in the amniotic fluid of ten percent of all live births.² This is in contrast to the dark green, thick meconium which can cause MAS. Sixty percent of the infants covered with meconium will aspirate, and 20-25% of these will develop the meconium aspiration syndrome with subsequent neonatal morbidity or mortality. The mortality rate in neonates with MAS has been reported to be as high as 25%.³

Intrauterine hypoxia, both acute and chronic, can occur as a result of fetal insult or compromise. A vagal reflex initiated by hypoxia results in passage of meconium,⁴ especially in post date infants. (Figure 1) In addition to meconium passage, hypoxia will also initiate reflex gasping and bradycardia in the fetus. Potentially aspiration can occur in utero as well as after delivery.^{4, 5}

Meconium in the amniotic fluid is present in both diffuse particles and in large plugs which, when aspirated, results in lower airway obstruction and upper airway obstruction, respectively. Following aspiration, further hypoxia, hypercapnea, and acidosis occur. These infants may then develop transient cardiomegaly, R→L shunting across the ductus leading to murmurs, poor peripheral perfusion and cerebral hypoxia and seizures.

PREVENTION

The initial step in prevention of MAS is the recognition of meconium and its significance.

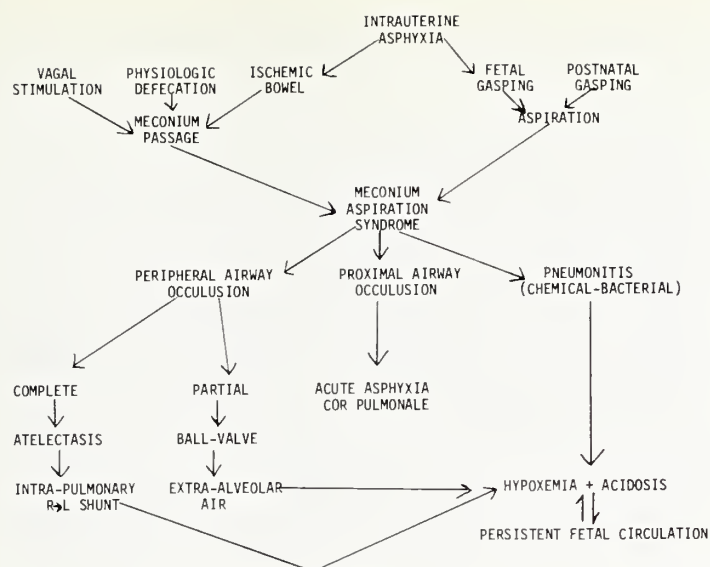


Figure 1. Schematic representation of the pathogenesis of meconium aspiration syndrome.

When significant meconium (not the light yellow-green meconium fluid seen in ten percent of patients) is noted, fetal monitoring should be implemented if not already done. A second physician should be notified so he may be present to assist in neonatal resuscitation and intubation.

At the time of delivery, a De Lee suction trap should be implemented after delivery of the fetal head on the perineum. The suction tubing is placed in the nares to the level of the nasopharynx and cleared of meconium. The oral cavity and posterior pharynx is then likewise suctioned. If a cesarean section is performed, it is convenient to have a sterile pediatric suction catheter connected to the routine suction apparatus. The infant's nasopharynx is suctioned after delivery of the fetal head through the uterine incision and prior to delivery of the thorax.

Following the use of the De Lee suction, delivery is performed in the usual manner with attention to expediency. Once delivered, the infant is intubated with a Pentax endotracheal tube (3-3.5mm) with direct suction on the tube by the physician. The trachea is re-intubated until no meconium is aspirated.

Suctioning through the ET tube with a small suction catheter is ineffective because of the small diameter of the suction catheter. If used, inadequate removal of the meconium will result.

Positive pressure ventilation should always be avoided prior to endotracheal suctioning. Positive pressure will force meconium further down the bronchial tree therefore further complicating the disease.

Saline lavage and steroids, previously advocated by some, have been found to increase neonatal morbidity. Clearing the nasopharynx and oral cavity, followed by endotracheal suctioning prevents the aspiration of pharyngeal and tracheal meconium at the neonate's initial breath of life.

TREATMENT

Following delivery, even after De Lee suction and endotracheal suction, a small number of infants will develop MAS. The majority of the infants probably experienced intrauterine aspiration from the gasping reflex. The infants are found to have low one- and five-minute Apgar scores at birth.

The infants with MAS commonly have gasping or rapid respirations, retractions, and increased AP diameters secondary to hyperinflation. Rales may or may not be present on auscultation.

Pulmonary alveolar rupture is common in these infants and a chest x-ray will determine the presence of a pneumothorax or pneumomediastinum. This entity should be

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A 1971 graduate of the University of Kentucky College of Medicine, Mary Frances Block, MD, is now assistant professor of the Department of Gynecology and Obstetrics at the University of Oklahoma Health Sciences Center. She is a member of the American College of Obstetrics and Gynecology and a junior fellow of the Oklahoma City Obstetrics and Gynecology Society.

Since her graduation from the University of Oklahoma College of Medicine in 1971, Mary Anne McCaffree, MD, has been certified by the American Board of Pediatrics and the American Board of Neonatology. She is assistant professor and chief of the Neonatal Services at OUHSC. Among her medical affiliations are the Alpha Omega Alpha and she is a candidate of the American Association of Pediatrics and the American Thoracic Society.

expected if the clinical status deteriorates suddenly. All infants with clinical symptoms should have a chest radiograph to determine this frequent complication.

Lungs remove meconium rapidly and marked recovery can usually be noted after 48 hours of life. During this period of time the treatment is supportive. Severe complications can and will result with non-aggressive treatment.

Oxygen administration, correction of acidosis, support with a mechanical ventilator and intensive care of infants who remain hypoxic and acidotic is the proper treatment in the neonatal period. When pneumothorax occurs, chest tubes should be placed as well as the use of a mechanical ventilator. Chest physiotherapy is crucial in removing meconium in these infants.

COMMENTS

There is no doubt that MAS is a cause of neonatal morbidity and mortality. It is a preventable syndrome but one which requires anticipatory care in order to remove meconium prior to establishment of effective neonatal breathing.^{1, 6}

Ting and Brady² have clearly shown the significance of tracheal toilet in a retrospective study of 125 meconium-stained infants. Of those with no tracheal toilet, 80% became symptomatic with 45% neonatal deaths. Of those suctioned, only 27% became symptomatic and there were no deaths.

With the recognition of meconium and its significance, aggressive treatment including De Lee suction and endotracheal aspiration can prevent MAS in the majority of cases. In those cases where MAS does occur, transfer of the infant to a neonatal intensive care unit can dramatically decrease neonatal mortality. □

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At the closing session of the 1978 Oklahoma Public Health Association Meeting, State Health Commissioner, Dr Joan Leavitt, delivered an address regarding public health.

In her speech she questioned why it is that the public doesn't respond to what we tell them. She suggested that a possible reason is that health professions have not come to grips with three things: 1. A willingness to be objective and cooperate in the development of programs without regard for territorial protection. 2. A willingness to apply communication skills, especially that segment so often neglected — a willingness to listen. 3. A willingness to identify our publics and spend enough of our resources to know and address the specific needs of a given public.

She asked: Do we know how to relate to each other — to the other "professionals" we deal



News From The Oklahoma State Department of Health

with outside our various sphere of interest? Have we made each other aware of our own potential and abilities, our "reason for being"? Have we in the so-called "public sector" developed an understanding interlocking relationship with "private professionals"?

Her charge to the assembled members was that just as "no man is an island," no agency is "an island," no commissioner is "an island," no employee is "an island." Together we can leave our islands, bridge the gaps and approach the problem we set out to solve. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MARCH, 1978

DISEASE	March 1978	March 1977	February 1978	Total To Date	
				1978	1977
Amebiasis	4	4	3	7	4
Brucellosis	—	—	1	1	—
Chickenpox	—	169	—	—	514
Encephalitis, Infectious	1	3	—	1	4
Gonorrhea (Use Form ODH-228)	1168	1146	953	3070	3069
Hepatitis, A, B, Unspecified	93	66	58	165	192
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	3	1	4	8	2
Meningitis, Aseptic	3	6	3	10	10
Mumps	—	—	—	—	273
Rabies in Animals	10	47	16	38	85
Rheumatic Fever	—	—	—	—	1
Rocky Mountain Spotted Fever	—	—	—	—	1
Rubella	—	9	1	3	17
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	4	16	—	7	39
Salmonellosis	3	1	15	31	10
Shigellosis	6	1	6	25	7
Syphilis, Infectious (Use Form ODH-228)	7	7	13	30	21
Tetanus	—	—	—	—	—
Tuberculosis, New Active	37	32	35	87	77
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—
Whooping Cough	2	1	2	5	2

Delegates Retain Education Requirements

OSMA delegates have voted by a near unanimous margin to retain the current continuing medical education requirements for the next three years and to poll the state's doctors at the end of that period to determine if CME should be mandatory or voluntary. The action came at the May 3-6 annual meeting of the Oklahoma State Medical Association which was held recently in Oklahoma City.

The question of continuing medical education was one of the most controversial items considered at this year's annual meeting. The current OSMA program calls for all members to have an active American Medical Association Physician Recognition Award by January 1, 1981. Those not fulfilling this requirement will not be eligible for state membership.

However, a resolution introduced by the Oklahoma Delegation called for an end to the compulsory CME program with medical education being conducted on a purely voluntary basis. A great deal of debate was heard at the Reference Committee hearing on this topic, but the vote on the issue was a hobbling 4-4. Therefore, the Reference Committee sent it back to the House of Delegates for resolution with no recommendation.

Once on the House of Delegates floor, Dr Kent Braden, Oklahoma City, offered an amendment to the resolution which was originally filed by Oklahoma County. The amendment in effect struck the entire resolution and replaced it with provisions which placed the House of Delegates on record as being opposed to relicensure in any manner as well as National Health Insurance. The same new wording instructed the OSMA to continue with the present program and to conduct the poll at the end of the present three-year period.

The 160 member House of Delegates also unanimously defeated a resolution which would have instructed the OSMA to seek a ban on sexual reassignment surgeries now being performed at University Hospital. Debate in Reference Committee was unanimously in op-

position to this resolution as was the eventual vote.

In other action the delegates also:

- Approved the Secretary-Treasurer's Report and a \$30 dues increase. This brings OSMA dues to \$180 per year effective January 1, 1979, below the national average. OSMA members have not had a dues increase since 1975, although programs and services have expanded appreciably since then.

- Approved a resolution demanding that the Department of Health, Education and Welfare not publish Medicare and Medicaid reimbursement lists which imply that unassigned funds were paid to physician providers. The House also amended the resolution submitted by the Blaine County Medical Society to instruct that unassigned benefits be attributed to persons enrolled in the program rather than physicians.

- Called for reinstatement of the American Medical Association's Sports Medicine Committee.

- Approved a resolution calling for the Joint Commission on Accreditation of Hospitals to cease its attempts to solve clinical problems with "paperwork solutions" and to return to "quality patient care as the principal accreditation criterion."

- Approved a resolution commending the Oklahoma Utilization Review System as an "extraordinarily cost effective approach to cost containment" and called for this system to be promoted nationwide.

- Again supported attempts to recruit physicians and their families to rural portions of Oklahoma and to increase the number of physicians in underserved portions of the state. The House, however, stopped short of the original resolution which instructed that a full report on these activities be filed at the next annual meeting. Both the Reference Committee and the House of Delegates felt that the provisions of this resolution would have demanded more staff time and finances than were available.

- Unanimously approved a resolution which calls for the OSMA to support enactment of legislation which would require immunization of all children enrolled in child care facilities in this state.

- Adopted a resolution in support of comprehensive health education in all public and private schools in Oklahoma, kindergarten through twelfth grade. This same resolution volunteered the assistance of physicians in

teaching health education courses whenever possible.

●Voted down two resolutions which called for an end of Oklahoma's unified membership concept with the American Medical Association.

The House also approved council and committee reports on the activities of the past year plus several special reports such as the underwriting control plan, malpractice indemnity funds, a task force on cost containment and the Workers Compensation Task Force.

For details of the actions of the House, refer to the proceedings section of this *Journal*. □

New OSMA Officers Elected

Dr Marvin K. Margo, an Oklahoma City orthopedic surgeon, has been inaugurated president of the Oklahoma State Medical Association. Outgoing President Dr C. S. Lewis, Jr., Tulsa, gave Dr Margo the symbolic gavel during the May 3-6 OSMA annual meeting. At the same meeting a number of new OSMA officers were also elected.

New officers for the coming year are Dr William M. Leebron, Elk City, president-elect; Dr Floyd F. Miller, Tulsa, vice-president; Dr S. N. Stone, Oklahoma City, speaker of the House of Delegates; Dr George Kamp, Tulsa, vice-speaker of the House of Delegates; Dr J. B. Eskridge, III, Oklahoma City, chairman of the Board of Trustees; Dr M. Joe Crosthwait, Midwest City, AMA delegate, position II; Dr Rex E. Kenyon, Oklahoma City, alternate AMA delegate, position II; Dr Orange M. Welborn, Ada, alternate AMA delegate, position III; and Dr Harlan Thomas, Tulsa, AMA delegate, position III.

OSMA trustees and alternate trustees elected during the annual meeting are Dr D. R. Rumph, McAlester, alternate trustee from District X; Dr Thomas Rhea, Idabel, trustee from District XI; Dr Preston Bagley, Antlers, alternate trustee from District XI; Dr Clarence P. Taylor, Ada, trustee from District XII; Dr James B. Miller, Ardmore, alternate trustee from District XII; Dr A. Craig Roberson, Anadarko, trustee from District XIII; Dr William A. Matthey, Lawton, alternate trustee from District XIII; Dr Lowell N. Templer, Altus, trustee from District XIV; and Dr Philip Kingery, Mangum, alternate trustee from District XIV. □

Journal Receives Sandoz Award

One of the most pleasant parts of the OSMA annual meeting this year was the presentation of the Sandoz Medical Journalism Award to *The Journal Of The Oklahoma State Medical Association*. John Cole from the Sandoz Pharmaceutical Office in Memphis, Tennessee, was on hand at the closing session of the OSMA House of Delegates meeting to present the award to *Journal* Editor, Dr Mark R. Johnson. *The Journal* was cited for excellence in layout and editorial content and won this year over the largest number of entries ever recorded.

For its first place finish, *The Journal* won both a plaque and a \$500 prize. The \$500 will be used to set up an award for prize-winning papers submitted by medical students. □

1979 Annual Meeting Chairmen Appointed

The following physicians have been appointed to head planning committees for the 1979 annual meeting which will be held in Tulsa: Scientific Program, E. N. Lubin, MD; Exhibits, Roger Haglund, MD; Entertainment & Social, Carl Morgan, MD; Physical Properties, Walter Gary, MD; Sports, S. A. Levit, MD; Golf - William Benzing, MD; Tennis; Medical School Liaison, Robert Perryman, MD; Publicity, Ray Cornelison, Jr., MD, Oklahoma City, and Mike Haugh, MD, Tulsa, chairman; and Ladies Activities, Anita Robards. □

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Cost Containment Panel Named

A group of Oklahoma health officials have joined forces to form the Oklahoma Cost Containment Panel. The new organization was formed in response to Rep. Dan Rostenkowski's (D-Ill.) challenge to the health care profession to voluntarily contain costs as a means of avoiding mandatory federal controls. Representatives of the Oklahoma State Medical Association, the Oklahoma Hospital Association, the Oklahoma Osteopathic Association, the Federation of American Hospitals, Oklahoma Blue Cross/Blue Shield, the Office of the Governor, the Oklahoma State Planning Commission, the Oklahoma State Health Systems Agency, and the Health Insurance Association of America — Oklahoma Chapter, make up the groups. Representing the OSMA are Dr Marvin K. Margo, Dr Hillard E. Denyer and Dr C. S. Lewis, Jr. □

Physician Manpower Improvement Cited

As of July 1 Oklahoma will have enough first-year residency positions to accommodate all the graduates of its medical schools. This will be the first time in its history that Oklahoma has not been forced to export medical school graduates to seek clinical training in other parts of the country.

Outgoing President Dr C. S. Lewis, Jr. brought the news to the 160 OSMA delegates who were assembled in Oklahoma City last month to attend the OSMA annual meeting.

Dr Lewis pointed out that only five years ago there were only 85 first-year residency positions in Oklahoma, and 136 graduates.

"This year," said Lewis, "the 210 MD and DO graduates will find 210 first-year positions available in Oklahoma institutions."

Lewis told the delegates that there are 4,468 physicians in Oklahoma and about 4,200 who are in active practice of one type or another. Of these, he said, 2,500 are involved in primary care. Doctor Lewis said these figures are very close to being the right numbers and the right kinds of physicians needed to fill the state's requirements which were projected back in 1968 and 1971.

He also said state training programs are now doing a good job of offsetting the 2.5 percent

attrition rate and the 1.3 percent annual population growth of the state.

Dr Lewis also revealed the findings of a recent study which identified where physicians are located in Oklahoma and how many of our citizens live more than 15 miles from primary medical care. For those of us who have been told time and time again that many parts of Oklahoma are medically underserved, the findings were surprising.

Only 9,600 Oklahoma citizens live more than 20 minutes or 15 miles from primary care . . . about 0.3 of 1 percent of our population.

Dr Lewis said many of the health manpower problems of rural Oklahoma are being solved by the activities of the Oklahoma Physician Manpower Training Commission and the community matching and rural scholarship programs it administers.

According to Dr Lewis there are 112 physicians in training now who have service obligations to small towns or rural areas of the state, through these programs. □

CALENDAR OF EVENTS OSMA MEETINGS

Board of Trustees	October 5, 1978
Council on Planning & Development	October 26-27, 1978
Board of Trustees	October 29, 1978
Board of Trustees	February 3, 1979
Council on Planning & Development	April 6-7, 1979*
Board of Trustees	May 2, 1979
*Tentative Dates	

AMERICAN MEDICAL ASSOCIATION MEETINGS

Annual Meeting (St. Louis)	June 18-21, 1978
Interim Meeting (Chicago)	December 2-6, 1978
Annual Meeting (Chicago)	July 22-26, 1979
Interim Meeting (Hawaii)	December 2-5, 1979
Annual Meeting (Chicago)	July 20-24, 1980
Interim Meeting (San Francisco)	December 7-10, 1980
Annual Meeting (Chicago)	June 7-11, 1981
Interim Meeting (Las Vegas)	December 6-9, 1981

Doctor Denyer Wins A. H. Robins Award



Dr. Hillard E. Denyer, Bartlesville, was awarded the A. H. Robins Physicians Award for Outstanding Community Service during the recent OSMA annual meeting. The award was presented by A. H. Robins officials at the closing session of the House of Delegates. Dr Denyer is the president of the Oklahoma Foundation for Peer Review and a past-president of the OSMA. He is also a former OSMA trustee, former trustee of the Oklahoma Medical Research Foundation, former trustee of Oklahoma Blue Cross/Blue Shield, and a national advisor to the American Association of Medical Assistants. He has also served as director of the Bartlesville Chamber of Commerce. □

Abandon Radical Mastectomy For Breast Cancer, Experts Say

Radical mastectomy for breast cancer does not increase survival compared to more conservative operations and should be abandoned except in special circumstances, says a report in the April issue of *Archives of Surgery*, a scientific journal of the American Medical Association.

"The question of what operation to use in the treatment of cancer of the breast has long been debated," say a team of specialists.

Dr Alfred C. Meyer and Dr Simmons S. Smith of the Rockford, Illinois, School of Medicine and Meredith Potter of Rockford College, have surveyed all women operated on in Rockford for breast cancer from 1924 to 1972 who could be followed for at least five years after surgery. Most of the patients were followed for ten years, or until death.

Many different surgeons were involved, and each used the type of operation he thought best. Some were radical mastectomy, some simple mastectomy, some modified radical mastectomy and a few simple removal of lumps.

"An analysis of 1,686 surgically treated carcinomas of the breast in one community showed no statistically significant differences in five and ten-year survival for simple, mod-

ified radical, or radical mastectomy," the researchers conclude.

Likelihood of cancer developing in the opposite breast decreased from 21 per cent among women younger than age 30 to 5 per cent among those 80 or older. Average for the entire group was 8 per cent.

There is no appreciable difference in ten-year survival in the age range of 35 to 75 years, but the disease seems milder in older women who approach their normal life expectancy, they say. □

No NHI This Year Predicts Talmadge

Senator Herman E. Talmadge (D-Ga.) says he sees no chance for passage of a national health insurance bill this year. The chairman of the Health Subcommittee of the Senate Finance Committee told a meeting of the Health Insurance Association of America recently, "I do not anticipate any action in the 95th Congress on national health insurance with the possible exception of consideration of coverage for catastrophic illness . . . The many billions of additional dollars necessary to pay for an expanded comprehensive program are just not available."

Talmadge said he would support a government program to provide assistance to families who are faced with catastrophic medical bills, but also said no program should be implemented until the government finds a way to control the rising costs of Medicare and Medicaid.

"Medicare and Medicaid will cost the federal and state taxpayers more than \$50 billion in fiscal 1979," said the Senator. □

AMA Sues Over Physician Lists

The American Medical Association announced June 2 that it had filed a class action suit in federal court against the Secretary of the Department of Health, Education and Welfare, Joseph Califano. The suit seeks a temporary injunction preventing the release of lists of physicians who participate in the Medicare program and the amounts of payments they receive. A similar suit was filed in Louisiana by the Council of Medical Staffs. □

Medicine: Technology in the Marketplace

Editor's Note: In December, 1977, the National Commission on the Cost of Medical Care released its controversial findings. The report listed 48 recommendations which were drawn from the studies of four Task Forces . . . supply, demand, technology and the medical marketplace.

The May Journal featured the reports of the task forces on supply and demand. The following are the reports from the task forces on technology and the medical marketplace.

The Journal of the Oklahoma State Medical Association neither accepts nor rejects the findings of these task forces, but carries this special report as a service to its subscribers.

Today there is a growing opinion that new technologies are a major source of health care cost inflation. The perception that technology is creating a problem is spreading and as a result, a variety of measures aimed at controlling technology have been proposed and in some cases adopted. However, the knowledge required to design and implement national policies that could judiciously control medical technologies is usually lacking. The Task Force on Technology hopes that its report will contribute to informed discussion of the issues and problems posed by medical technology. There are two basic objectives: 1) to examine the evidence on the effect of technology on health care costs; and 2) to evaluate the relative effectiveness or appropriateness of various cost containment measures.

The task force recognizes the need to avoid the bias inherent in a strict focus on the impact of technology on costs alone, inasmuch as technological advances have been, and continue to be, of great value to the public in facilitating diagnosis or averting disease, suffering, and death. The emphasis, therefore, is on ways of restraining future cost increases without losing the benefits of present and future technological innovations.

The impact of technology on health care costs is diverse, and the available evidence is incomplete. However, it seems clear that expensive technological advances have been inappropriately utilized in a significant number of circumstances and, to this extent, there has

been an unjustifiable increase in medical care costs.

Significant cost saving technological advances have occurred in the treatment of major diseases, such as tuberculosis, typhoid fever, diphtheria, lobar pneumonia, mental illness, and poliomyelitis. Although most of these advances took place prior to the early 1960s, their cost saving impact is still felt in the sense that they continue to avert substantial costs in the treatment of these diseases.

More recent advances, such as computed tomography (CT scanning), renal dialysis, open heart surgery, and radiotherapy, tend to increase per unit treatment costs because they make intensive use of health care resources. However, their impact on total costs depends on the extent of their use, which in turn depends on the willingness of the health care system to finance that use.

Current studies of the effect of technology on health care costs concentrate on the size of the impact and not on the channels through which technology affects cost. Since there are several different processes involved in the linkage between technology and its impact on cost, it is important to understand how these processes work. Only then is it possible to suggest ways of reducing the cost impact of new technology and/or methods of using technology more cost effectively.

Much of the current concern about the contribution of technology to health care cost inflation centers on the tests and procedures performed with expensive equipment. Since these technologies are most frequently located in hospitals, the discussion about containing their costs focuses on acquisition and utilization in the hospital setting. Better understanding is needed of the difference between the relative inflationary impact resulting from the acquisition of expensive capital equipment, as opposed to a wider variety of less expensive items, whose cost impact can be attributed to heavy utilization.

In the area of research and development, the cost problem is twofold: First, many new technologies make intensive use of medical resources, and hence tend to be cost increasing; second, there is a need for research to evaluate the safety and efficacy of new technologies.

One common element that arises in the case of acquisition and utilization, and to a lesser extent in the case of research and development, is the limited degree of cost consciousness

among all parties in the health care delivery system. It is of primary importance, therefore, to note the distinction between the cost of a given technology, as determined by its intensity of resource use; and the impact of that technology on total costs as determined by the extent of its acquisition and utilization within the health care system. The task force believes, therefore, that whereas only research and development can provide cost saving new technologies, there are interim options for moderating the cost impact of technology by effecting greater cost consciousness in the acquisition and utilization process.

Three broad types of policy measures span the range of existing and proposed attempts to directly control the cost impact of medical technologies: 1) placement review; 2) utilization review; and 3) research and evaluation efforts, including technology assessment.

Placement Review

Placement review includes two basic types of activities, the planning and review of acquisition decisions, and financing restrictions on acquisition. Certificate-of-need and S.1122 review programs are the chief mechanisms of formal planning and review of acquisition de-

cisions in this country. Capital expenditure limits, such as those proposed under the Hospital Cost Containment Act of 1977, represent the major financing restriction currently under consideration. Used in conjunction with certificate-of-need, capital expenditure limits would give the government health planning system considerable control over both the size and composition of large capital expenditures. The task force believes that the health planning process can be strengthened.

Recommendation 1: Certificate-of-Need

Alter certificate-of-need and S.1122-type review: 1) Expand CON coverage to provider settings outside the hospital, including private physicians' offices. 2) Restrict CON coverage to large capital expenditures and changes in services. The \$100,000 threshold is a reasonable figure. 3) Decertify existing facilities in cases involving clear duplication and underutilization of services. Just compensation should be made to institutions involved.

Recommendation 2: Placement Review Criteria

Develop consensus criteria for the placement of expensive facilities and capital equipment,



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- Medical Consultations



such as CT scanners and open heart surgery units, for use by state and local health planning agencies in making placement decisions of this type. At the present time, state and local planners lack the information needed to make decisions concerning complex technologies. The criteria should be developed at the national level with the cooperation of expert health professionals and government. The national criteria should be flexible enough to meet specific needs of individual states and localities. States might be given the option of exceeding the national criteria within established limits. The criteria should take into account factors such as medical need, operating as well as capital costs, and other expected benefits and costs of the specific technology. The national guidelines mandated under the National Health Planning and Resource Development Act of 1974, and recently published by HEW, are a step in this direction, but assurances are needed that professional groups will be intimately involved in their development.

Recommendation 3: Regional Centers

Where cost saving opportunities exist, regional centers should be established for high-cost specialized technologies. The number of such opportunities may be limited. Separate planning systems which would fragment and overlap with CON review should not be allowed to proliferate with the development of regionalized programs.

Recommendation 4: Capital Expenditure Limits

Capital expenditure limits, such as those proposed in the Hospital Cost Containment Act of 1977, should not be enacted at this time because of inadequate knowledge regarding their probable effects and the absence of valid bases for determining the appropriate level and distribution of capital expenditures.

Utilization Review

Utilization review includes a variety of programs which evaluate physicians' decisions in ordering medical services for their patients. In addition to reviewing utilization decisions, it is possible to place restrictions on the financing

or reimbursement of the services ordered. Physicians' attitudes toward utilization review programs and physicians' awareness of the cost impact of their decisions in ordering medical services for their patients are important factors affecting the success or failure of utilization review programs.

Recommendation 5: Mandatory Coursework and Examination

Educate physicians to be more cost conscious. Although nothing should be done to discourage medical schools from developing constructive programs, it is suggested that prime focus should be on the incorporation of a course at the graduate training level in hospitals, with a good textbook, and with the active sponsorship of county and state medical societies, as well as osteopathic societies. It would clearly be necessary to make this a mandatory part of the physician education — subject to examination.

Recommendation 6: Criteria and Methods of Review

PSRO and/or other techniques should be expanded and altered in a variety of ways to deal with the problems posed by medical technologies: A) Develop workable standards of appropriate care whenever possible; B) Emphasize diagnostic tests and surgical procedures in retrospective medical audits; C) Encourage increased use of prospective assessment of selected conditions prior to hospitalization; D) Utilize more selective methods of concurrent evaluation.

Recommendation 7: Provider Performance Standards

Develop performance standards for physicians performing certain highly complex and costly procedures, such as open heart surgery. These standards should include minimum utilization criteria as well as initial qualifications.

Recommendation 8: Reimbursement Restrictions

Encourage governmental and other third party payors to experiment with various types of financing and reimbursement restrictions in the area of utilization. A) Encourage govern-

mental and other third party payors to take more aggressive actions to reduce expenditures for inappropriate care. Programs, such as the Blue Shield Medical Necessity Program, which inform providers prospectively about nonreimbursable tests and procedures, should be expanded. Third parties should work more closely with PSROs to identify ways of improving patient management. In making retrospective payment denials, third parties should protect patients against being forced to pay the bill; B) Encourage governmental and other third party payors to only reimburse services performed on equipment approved by placement review; and C) Reimbursement policies of governmental and other third party payors should attempt to insure that charges for ancillary services, such as CT scanning, are based on appropriate standards of utilization. Profitable underutilization of these services should be inhibited.

Research and Evaluation Efforts

Research and evaluation efforts to improve the cost effectiveness with which medical technologies are used can be divided into two

categories: technology assessment and research strategies in both the biomedical and health services research areas. Assessment of technological innovations is an attempt to evaluate the wide range of impacts inherent in the use of medical technologies; the assessment of medical efficacy and cost impact are of special importance. Technology assessment is currently conducted in a wide variety of governmental and private settings. The greater the cost impact of medical technologies, the greater the desirability of evaluating technologies prior to wide spread acquisition and utilization. Since the potential cost savings and health benefits of technological advances are substantial, technology assessment should be carried out in a manner which does not impede research and development. Rather, research strategies are called for which redirect biomedical and health services research toward cost saving technological advances.

Recommendation 9: Technology Assessment and Information Dissemination

There should be a substantial expansion of efforts to assess medical technologies and to

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collect and disseminate the resulting information. Because of the limitations of existing assessment methods, it is important to develop a strategy for selecting assessable technologies. In addition, a national center should be established to serve as a central depository and clearinghouse for information on health care technologies. While the center would be an important source of information for physicians, patients, and all others concerned with medical technologies, it should be a primary resource for governmental and other third party payors in carrying out the provisions of Recommendation 8.

Recommendation 10: Restrictions on Diffusion of Technologies

There should be no expansion of statutes to make the diffusion of new technologies contingent upon official technology assessment, except to assure safety. The Food and Drug Administration's market clearance tests of drugs and medical devices, and restrictions on the reimbursement of "experimental" procedures under Medicare, should be limited in scope. Furthermore, a very careful, selective inquiry should be conducted before restrictions on diffusion are imposed. The government has the responsibility of insuring that grossly unsafe technologies are not widely diffused. However, safety assessments should be carried out promptly, and technology should not be withheld from the public while lengthy efficacy tests are conducted. The government may, quite legitimately, decide to deny reimbursement for technologies classified as experimental. However, the government has an obligation to fund the research required to adequately assess these experimental technologies.

Recommendation 11: Basic Research

Fund increased research for basic scientific understanding of disease mechanisms, which in the long run offers the best hope for significant cost saving advances against cancer and other major diseases.

Recommendation 12: Research Toward Cost Saving Innovations

Direct more research toward solving

technology-related cost problems. For example, more research might be directed toward diseases which are especially expensive to treat with current technologies. Or more research might be done in designing methods to utilize potentially cost-saving technologies.

Recommendation 13: Evaluation-Reorganization of NIH

The research institutes of the NIH should be evaluated as to whether their funding is distributed in the most cost-effective and productive manner. If not, NIH should be reorganized to accomplish a better balanced research program.

Introduction

Certain characteristics of the medical care financing and delivery system — the medical care marketplace — contribute to the rising costs of medical care. This report identifies specific shortcomings within the medical care marketplace, reviews a wide variety of options for modifying the medical care delivery system, and recommends the adoption of a number of specific programs.

The medical care marketplace diverges from the ideal of economics textbooks in several ways. Among the more important are: 1) the structure of health insurance that reimburses charges or costs; 2) the limited range of consumer choice in employer provided plans; 3) the income tax treatment of health insurance premiums or premium contributions; and 4) consumer ignorance regarding the cost and efficacy or necessity of specific medical procedures and the potential ability of the provider to manipulate demand. The task force's recommendations are addressed directly at these shortcomings.

The third party payment system plays a critical role in the medical care marketplace: roughly half of all expenditures for physicians and over 90 percent of all expenditures for hospital care are paid for by third parties. So long as insurance pays — and it usually does — here is little resistance to costly medicine. On the other hand, medical care insurance provides an important service in protecting individuals and households from health related financial ruin. Therefore, the task force identified strategies for cost containment which were compatible with protecting families from large, unexpected losses.

Alternative Cost Containment Strategies

The task force believes that there are three alternative approaches to cost containment: 1) continuation of the current financing and incentives system; 2) strengthening consumer price consciousness; and 3) expansion of public utility regulation.

The current arrangement has unquestionably helped to place American medicine among the best, but also the most costly, in the world. Costs are likely to continue to rise under the present system, and the public seems increasingly unwilling to bear these costs. Accordingly, the choice is therefore probably between the latter two options. Put another way, in the absence of new initiatives to strengthen price consciousness, increased public utility regulation of the medical care sector appears inevitable.

The task force examined several schemes for strengthening price consciousness in the medical care sector. Because of the role played by insurance in the health care system, these schemes all involved some modification of the way medical care is financed. The options examined included expanded use of cost sharing, capitation or HMO arrangements, and experience rating providers. In each case the fundamental issue was how to preserve the valuable risk reducing function of insurance while still introducing incentives to be cognizant of cost.

The task force believed that financing arrangements could be developed which would strengthen price consciousness and encourage the cost effective delivery of care. Evidence in support of this view exists in the experience of some financing arrangements currently in use in the medical care sector. However, the task force members realized that there is reason for caution. Some of the methods suggested are untried. Further, such a strategy has potential drawbacks. First, to the extent that price is used to contain utilization (e.g., as in cost sharing) or to reduce the subsidy for the use of high priced providers (e.g., as in experience rating providers), a question of equity arises. Certainly it would not be appropriate to adopt schemes which use price to deny low income families access to quality medical care. However, the recommendations of the task force are designed to ensure access for low-income families. Secondly, a well-functioning market requires informed consumers. However, because of the complexity of medical care, it is difficult to inform consumers. The task force

therefore recommends an approach that should increase information available to consumers. Recognizing the potential problems, however, the task force recommends experimentation to ascertain their magnitude.

The task force also examined extending public utility regulation to the medical care sector, including regulation of rates and revenues, controls on capital acquisitions, and review of professional performance. In principle, such regulation could contain costs. Regulation also has the potential of allocating medical care on the basis of need instead of ability to pay. On the other hand, the experience with regulation in other industries has been unfavorable. It has generally reduced competition and innovation, and lead to higher, rather than lower, prices.

Moreover, there is reason to doubt that regulation will limit costs in a way that patients and providers would find satisfactory, and it would inevitably be a costly process. The major reasons for this conclusion are that: 1) to make a substantial impact upon costs, the regulator will have to affect literally millions of decisions having to do with individual patient management; however, in the presence of insurance or prepayment, incentives for the provider and patient to want more are left in place; 2) the information available to the regulator in assessing the impact of regulatory decisions will be meager. To form an opinion about the appropriateness of treatment in each individual case, the regulator will have to review individual cases. Thus, the regulator's alternatives are either poorly informed decisions or expensive review that still admits the possibility of error; 3) patients differ in the type of therapies they want and would be willing to pay for; while a centralized regulator could not possibly know these preferences, every decision would impact upon them; and 4) simple regulation of revenues reduces the incentives for excellence. While the task force generally believes that regulation of revenues is the only form of regulation likely to be effective in containing costs, it also recognizes that under such a system providers are seldom rewarded for better performance, or for pleasing patients.

Recommendations

The task force was faced with choosing between two strategies — strengthening cost consciousness or increasing public utility regulation. Both strategies have pros and cons.

After weighing them the task force decided that the more promising approach to cost containment is strengthening price consciousness. An important advantage of this strategy is that total expenditures are determined by summing individual decisions rather than by administrative fiat. To the extent possible, the task force believes that decisions should remain with informed consumers, as they best know what they want. But it is essential that consumer decisions be based on informed choice with respect to the benefits from and true cost of alternatives.

While the task force believes that medical care institutions can be altered to take greater cognizance of cost, it wishes to emphasize that cost containment is not a desideratum in itself. The object should not be to keep resources in medical care from growing, but to find what level and rate of growth the American public wants. There is reason to doubt that the public really desires to give up what it now foregoes to pay for medical care services. There is also reason to doubt that a regulator can know what the public is willing to pay for. One of the strengths of increasing price consciousness is that it provides a mechanism for ascertaining what the public is willing to pay for.

Most of the task force's recommendations involve the market for medical care insurance and health plans. Recommendation 1 focuses on making consumers more cost conscious when purchasing plans; Recommendation 2 addresses the innovation of new financing mechanisms. Recommendations 3, 4, and 5 concern providing consumers the kinds of information needed to make informed, rational choices when purchasing both medical care and medical insurance or health plans. Recommendations 6, 7, and 8 address public utility regulation, experiments with multiphasic health evaluations, and utilization review, respectively.

Recommendation 1: Strengthening Price Consciousness

To strengthen price consciousness among consumers and providers of medical care, the task force recommends:

A. New employees of firms that provide health care benefits must be allowed to choose among a number of certified health care programs (at least two where two exist) offered to

them by individual carriers, including Health Maintenance Organizations (HMOs). At periodic intervals, all employees may change their medical care program — choosing among the same options made available to new employees. In firms with employees represented by unions, the range can be established through the collective bargaining process.

B. To give employees an economic incentive to shop for cost-effective medical coverage, employers who contribute to their employees' insurance premiums should do so through contributions that are the same for competing plans. In the case of plans whose premium cost is less than the contribution, the difference should be paid to the employee as a rebate or in the form of additional benefits. The form of the rebate could be determined through collective bargaining. Such principles should also apply to public programs, especially Medicare.

C. In order to increase consumer cost consciousness at the time of purchase of health plans or medical insurance, the current exclusion from taxable income of employer paid health insurance premiums should be eliminated and the current tax deduction for consumer payments for insurance premiums should either be replaced with a fixed dollar tax credit or fixed deduction. The tax treatment of payments for health plans and medical insurance should be identical for employer provided and self-purchased programs.

D. Individuals who purchase health plans and medical insurance on their own should have plans made available to them for the same actuarially determined price as that paid for employer provided plans.

E. Medical students should be exposed to the economics of medical care, the nature of resource scarcity, and the rationale for various institutions related to the organization and financing of medical care.

Recommendation 2: Alternative Health Care Financing Arrangements

A. HMOs have the potential to strengthen consumer price consciousness by competing on the basis of services delivered and price. In the past, public policy has not been neutral between HMOs and fee-for-service systems. The Commission strongly believes that policy should be neutral, and it encourages fair market competition between HMOs and other provider and insurance systems.

B. Experiments should be conducted to test

the effectiveness of other health care financing arrangements such as:

1. Variable Cost Insurance (VCI) — Health insurers would offer policies which would be tied to specific groups of hospitals based on cost — those which provide coverage for the more expensive hospitals would have the more expensive premiums. Consumers, in consultation with their physicians, would be free to choose hospitals; however, the amount of their expenses which is reimbursed would depend upon their coverage. Because consumers would benefit from purchasing lower priced plans, hospitals would have an incentive to contain their expenses in order to gain lower priced ratings. Even if consumers did not choose low priced plans, the subsidy of those who use high cost providers by those who use low cost providers would end.

2. Health Care Alliances (HCA) — Groups of physicians would be collectively experience-rated according to their adjusted annual expense per patient. All patient related expenses would be considered in arriving at an HCA's rating and adjustments for the sickness of patients would be included. Accordingly, it is expected that HCAs would have an incentive to contain costs. Because consumers could benefit financially by choosing the less expensive plans, physicians would have an incentive to deliver care cost effectively so as to hold down their ratings.

Recommendations 1 and 2 are aimed at strengthening price consciousness on the part of consumers and providers. However, in order for individuals to be effective consumers, it is necessary that they be able to obtain information on providers and health plans.

Recommendation 3: Consumer Information on Price and Service

Consumer information on price would be made relatively accessible to the extent HMOs, VCI, or HCAs, are adopted because the price would be communicated by the premium. However, to the extent cost sharing (deductible or coinsurance) is relied upon as a cost containment strategy, information on price will need to be readily available.

A. The task force believes that physicians should be able to advertise prices for rather well-defined procedures. Such advertising could also include length of time required to obtain an appointment, willingness to accept new patients (or Medicare/Medicaid patients),

institutional affiliations, and whether they are board-certified in their specialty.

B. "Truth in Insurance" programs should be adopted which would mandate that, under a standard format, certain information on insurance carriers and plans be published and made available to all prospective consumers. The information should include the extent of coverage for commonly used services, estimates of expected out-of-pocket expense — by family size and age, and financial information on the carrier, including retention ratios for plans providing insurance for fee-for-service provided.

Recommendation 4: Regulation of Insurance Carriers and Health Plans

The task force recommends that insurance carriers be certified on the basis of financial soundness, and that plans be routinely monitored to guard against misrepresentation of costs or benefits. It is strongly recommended that all carriers in a given regulatory jurisdiction be subject to the same standards.

Information on price alone is not adequate for proper functioning of the medical care marketplace. Obviously, information on quality is needed as well. This issue is addressed in Recommendation 5.

Recommendation 5: Information and Quality Assurance

The task force believes that information on quality assurance is required for meaningful competition among providers. The consumer must be in a position to appraise how various providers can benefit him and his family.

A. Recognizing that the quality of care given by a provider is difficult to measure, a major research effort should be undertaken to improve this ability. Such an effort should concentrate upon patient outcomes or upon process measures known to be associated with outcomes.

B. Research also needs to be done on how information on quality of care can be effectively communicated to consumers.

C. Voluntary recertification programs should be developed for physicians, and descriptions of the criteria for recertification, as well as information on participation in the programs by individual physicians, should be made available to consumers.

While the task force believes that increased

price consciousness provides a promising avenue for cost containment, it recognizes that strong arguments can be made for the increased use of public utility regulation; indeed, some believe that more regulation of the medical care sector is inevitable. However, the task force also recognizes that regulation in other industries has served to increase prices and limit the entry of new firms. Accordingly, it believes that if new regulatory initiatives are attempted, steps should be taken to avoid the experience of currently regulated industries. Even more importantly, it believes that additional regulation should not undercut attempts to strengthen price consciousness.

Recommendation 6: Public Utility Regulation

A. If the scope of public utility regulation (ie, controls on revenue, capital acquisition prices, etc.) is expanded, attempts should be made to evaluate its effects using carefully controlled experiments, for example, introduction of regulation only in a few areas. In light of the problems with public utility regulation in other industries, evaluation of regulatory options should take into account the effect of the regulation on competition between providers, including its impact on entry, innovation, and provider capture of the rate setting process.

B. Regulation whose rationale is cost containment should exempt organizations or areas where innovations are being tested whose purpose is cost containment, or where strategies to increase price consciousness are being successfully pursued.

Recommendation 7: Multiphasic Health Evaluations

The accounts of the success at Kaiser-Permanente of multiphasic health evaluation and resultant educational efforts, in terms of its potential for reducing patient anxiety and more efficiently utilizing physician time, have been noted by the task force. Therefore, it is recommended that carefully controlled experiments continue to be conducted to determine the cost effectiveness of multiphasic testing programs in diverse environments.

Recommendation 8: Utilization Review

The task force believes that utilization re-

view is potentially capable of providing important insights on the relationship between structure, process and medical outcomes. Whether this potential can be realized is an open question. Accordingly, the task force recommends systematic evaluation of existing utilization review programs. However, recognizing that even unofficial guidelines can effectively become rigid standards, and in order to provide flexibility for experimentation and innovation, the task force recommends against national guidelines or standards. □

OMPAC Elects New Officers

The Oklahoma Medical Political Action Committee has elected new officers for the 1978-79 organizational year. The following elections were made during the recent annual meeting of the Oklahoma State Medical Association. Elected are Orange M. Welborn, MD, chairman, Jack W. Parrish, MD, vice-chairman, and Martha Hendren, secretary-treasurer.

The OMPAC Committee will meet on July 23 at Oklahoma State Medical Association headquarters. Purpose of the meeting will be to review the 1978 elections. □

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Proceedings of the 72nd Annual Session of the House of Delegates of the Oklahoma State Medical Association

OPENING SESSION

I. CALL TO ORDER:

The House of Delegates convened its 72nd Annual Session in the Skirvin Plaza Hotel, Oklahoma City, Oklahoma, on May 3, 1978. The Speaker, S. N. Stone, MD, Oklahoma City, called the meeting to order at 3:15 p.m.

II. INVOCATION:

E. N. Lubin, MD, Tulsa, delivered the invocation.

III. REPORT OF THE CREDENTIALS COMMITTEE:

The presence of a quorum was reported by Thomas Rhea, MD, Chairman, Idabel. There were 107 Delegates present.

IV. APPOINTMENT OF COMMITTEES OF THE HOUSE:

Doctor Stone referred the Delegates to their handbooks for the appointment of the following committees to assist in the conduct of the meeting:

CREDENTIALS COMMITTEE

Thomas E. Rhea, MD, Idabel, Chairman
Edward W. Allensworth, MD, Vinita
F. W. Hollingsworth, MD, El Reno
Paul N. Vann, MD, Lawton

TELLERS

LeRoy Carpenter, MD, Spencer, Chairman
Frank W. Clark, MD, Ardmore
Jack L. Berry, MD, Okarche
David D. Rose, MD, Ardmore

SERGEANTS-AT-ARMS

Harlan Thomas, MD, Tulsa, Chairman
Ed L. Calhoon, MD, Beaver
Scott Hendren, MD, Oklahoma City

REFERENCE COMMITTEE NO. I

(9:00 a.m. — Crystal Room,
Skirvin Plaza Hotel)

Elvin M. Amen, MD, Bartlesville, Chairman
David D. Rose, MD, Ardmore

E. C. Yeary, MD, Ponca City
James D. Funnell, MD, Oklahoma City
Harry B. Tate, MD, Oklahoma City
James Brashear, MD, Norman
Rollie E. Rhodes, MD, Tulsa
Lyle Kelsey, Staff

REFERENCE COMMITTEE NO. II

(9:30 a.m. — Balinese Room,
Skirvin Plaza Hotel)

Edward K. Norfleet, MD, Tulsa, Chairman
J. W. McDoniel, MD, Chickasha
Armond H. Start, MD, Oklahoma City
Carl H. Guild, MD, Bartlesville
Billy Dale Dotter, MD, Okeene
Thomas C. Alexander, MD, Okmulgee
Edwin Rice, MD, Oklahoma City
Jake Jones, MD, Shawnee
Richard Hess, Staff

REFERENCE COMMITTEE NO. III

(10:00 a.m. — Executive Suite Annex,
Skirvin Plaza Hotel)

Thomas N. Lynn, MD, Oklahoma City, Chairman
William O. Coleman, MD, Oklahoma City
John E. Highland, MD, Miami
Jesse S. Chandler, MD, Muskogee
E. N. Lubin, MD, Tulsa
George M. Brown, MD, McAlester
Earl M. Robinson, MD, Enid
Michael Haugh, MD, Tulsa
Rick Ernest, Staff

V. INTRODUCTION OF SPECIAL GUESTS:

Mrs. Chester L. Young, Kansas City, outgoing President of the American Medical Association Auxiliary, was introduced to the OSMA House of Delegates. Mrs. Young brought greetings from the AMA Auxiliary and commended the OSMA Auxiliary for its work. She requested that all physicians encourage their spouses to become a member of the auxiliary.

Mrs. Neil B. Kimerer of Oklahoma City, outgoing President of the OSMA Auxiliary,

was also introduced, and she spoke of the activities of the auxiliary and expressed her appreciation for the help and support given by OSMA members, officers and staff.

Doctor Stone then introduced Mrs. Leon D. Combs, Shawnee, the incoming President of the Oklahoma State Medical Association Auxiliary.

VI. PRESENTATIONS:

Doctor J. B. Eskridge, III, Chairman of the Board of Trustees, presented the Distinguished Service Award for Outstanding Layman to Mr. W. K. Warren, Tulsa. Mr. Warren graciously accepted the award.

VII. REMARKS OF THE SPEAKER:

Doctor Stone welcomed the delegates and guests to the 72nd Annual Session of the Oklahoma State Medical Association.

VIII. REPORT OF THE PRESIDENT:

Doctor C. S. Lewis, Jr. presented his report and it was referred to Reference Committee No. III (A copy of the report is attached and made a part of these minutes.)

IX. REPORT OF THE PRESIDENT-ELECT:

Doctor Marvin K. Margo presented his report and it was referred to Reference Committee No. III. (A copy of the report is attached and made a part of these minutes.)

X. REPORT OF THE CHAIRMAN OF THE BOARD:

Doctor J. B. Eskridge, III, MD, referred the Delegates to the report of the Board of Trustees found in their handbooks, and presented information about actions taken at the Board of Trustees meeting earlier in the day, which are contained in the Supplemental Report of the Board of Trustees. (Both reports are attached and made a part of these minutes.)

XI. SECRETARY-TREASURER'S REPORT:

Doctor Armond H. Start stated that a detailed description of the Secretary-Treasurer's Report and Audit Report is included in the Delegates Handbook. Doctor Start recommended to the House that they vote in favor of a \$30 yearly dues increase, and this report was referred to Reference Committee III. (A copy of these reports is attached and made a part of these minutes.)

XII. INTRODUCTION OF TRANSCRIBING SECRETARIES:

Doctor Stone first introduced Jacque Leopold of the American Medical Association. He then introduced Judy Lake as transcribing secretary, followed by the entire OSMA staff: David Bickham, Richard Hess, Lyle Kelsey, Rick Ernest, Louise Martin, Jeanette Saunders, Suzanne Wilson, Marilynn Housley, Hannelore Roberts, and Janice Collins.

Louise Martin, Editorial Assistant of *The Journal of the Oklahoma State Medical Association*, was presented a plaque honoring her for 20 years of outstanding service to the OSMA. Mrs. Martin graciously accepted this award.

XIII. NOMINATIONS FOR ELECTIONS:

Doctor Stone announced the House would recess for ten minutes for all Trustee Districts X, XI, XII, XIII, and XIV to caucus.

Doctor Jack Fetzer, Vice-Speaker, declared the House open for nominations for the position of PRESIDENT-ELECT (one-year term of office).

William Leebron, MD, Elk City, was nominated by Frank K. Buster, MD, representing Beckham County Society.

Nominations were declared closed.

Nominations were declared open for the position of VICE-PRESIDENT (one-year term of office).

Floyd F. Miller, MD, Tulsa, was nominated by the Tulsa County Medical Society.

Nominations were declared closed.

Nominations were declared open for the position of SPEAKER, HOUSE OF DELEGATES (two-year term).

S. N. Stone, MD, Oklahoma City, was nominated by Kenneth W. Whittington, MD, representing Oklahoma County Medical Society.

Nominations were declared closed.

Nominations were declared open for the position of VICE-SPEAKER, HOUSE OF DELEGATES (two-year term).

George H. Kamp, MD, Tulsa, was nominated by the Tulsa County Medical Society.

Nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, POSITION II (two-year term).

M. Joe Crosthwait, MD, Midwest City, was nominated by Tony Puckett, MD, representing Oklahoma County Medical Society.

Nominations were declared closed.

Nominations were declared open for the pos-

ition of ALTERNATE DELEGATE TO THE AMA, POSITION II (two-year term).

Rex E. Kenyon, MD, Oklahoma City, was nominated by Oklahoma County Medical Society.

Nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, POSITION III (two-year term).

Harlan Thomas, MD, Tulsa, was nominated by Jack Parrish, MD, Seminole.

E. N. Lubin, MD, Tulsa, was nominated by the Tulsa County Medical Society.

Nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA, POSITION III (two-year term).

Orange M. Welborn, MD, Ada, was nominated for this position.

Nominations were declared closed.

Nominations were declared open for TRUSTEE and ALTERNATE TRUSTEE for the following Trustee Districts (three-year term of office):

DISTRICT X

Reporting on the caucus of representatives from District X, the following nominations were made:

D. R. Rumph, MD, McAlester, was nominated for the position of Alternate Trustee to fill the unexpired term of Delta W. Bridges, MD, who has resigned.

DISTRICT XI

Thomas Rhea, MD, Idabel, was nominated for the position of Trustee.

Preston Bagley, MD, Antlers, was nominated for the position of Alternate Trustee.

DISTRICT XII

Clarence P. Taylor, MD, Ada, was nominated for the position of Trustee.

James V. Miller, MD, Ardmore, was nominated for the position of Alternate Trustee.

DISTRICT XIII

A. Craig Roberson, MD, Anadarko, was nominated for the position of Trustee.

William A. Matthey, MD, Lawton, was nominated for the position of Alternate Trustee.

DISTRICT XIV

Lowell N. Templer, MD, Altus, was nominated for the position of Trustee.

Phillip N. Kingery, MD, Mangum, was nominated for the position of Alternate Trustee.

Nominations were declared closed.

XIV. ADDRESS FROM JAMES H. SAMMONS, MD, EXECUTIVE VICE-PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION:

Doctor Sammons opened his address by welcoming the OSMA as part of the team of organized medicine. He stated that medicine is under attack and has been for a long time, and that the biggest problem in medical care now appears to be cost.

Doctor Sammons added that Oklahoma's doctors can benefit from the 400 projects the AMA offers as an organization. He challenged doctors to let the AMA have an opportunity to be of help to them as individual physicians.

XV. INTRODUCTION OF COUNCIL AND COMMITTEE REPORTS AND RESOLUTIONS:

Doctor Stone advised the Delegates that a list of reports and resolutions was included in their handbooks, and that two late resolutions had been approved by the Board of Trustees.

XVI. ANNOUNCEMENTS:

Doctor Stone announced the meeting times and places for the Reference Committees on Thursday morning, May 4th.

He also announced that the Early Bird social hour would be held on the 14th floor of the Skirvin Hotel rather than at poolside.

The opening time for the Closing Session of the House of Delegates was announced for 2:30 p.m., Friday, May 5th.

XVII. NECROLOGY REPORT:

The Vice-Speaker of the House of Delegates, Jack Fetzner, MD, read the Necrology Report. (A copy of the report is attached and made a part of these minutes.)

XVIII. ADJOURNMENT OF OPENING SESSION:

The Opening Session of the House of Delegates was adjourned at 5:20 p.m.

NECROLOGY REPORT

1977 - 78

Paul N. Atkins, Sr., MD, Tulsa
Clifford M. Bassett, MD, Cushing

John C. Berry, MD, Norman
Richard L. Butler, MD, Fort Sill
William F. Carlile, MD, Oklahoma City
Robert J. Cassidy, MD, Oklahoma City
Donald V. Crane, MD, Tulsa
Wallace L. Dixon, MD, Cement
Leonard J. Ellis, Jr., MD, Oklahoma City
Louise K. Farr, MD, Oklahoma City
William P. Fite, Sr., MD, Muskogee
Herman W. Ford, MD, Tulsa
Samuel E. Franklin, MD, Broken Arrow
Clarence Gallaher, MD, Oklahoma City
Perry E. Hewitt, Jr., MD, Muskogee
Charles W. Israel, MD, Edmond
James P. Jobe, MD, El Reno
James R. Kay, MD, Norman
Walter S. Larrabee, MD, Tulsa
John L. Lehew, Jr., MD, Guthrie
Joseph C. MacDonald, MD, Oklahoma City
Edwin A. McGrew, MD, Norman
William M. Mussil, MD, Oklahoma City
James N. Owens, Jr., MD, Oklahoma City
Felix R. Park, MD, Tulsa
Harold Rosier, MD, Waurika
Ralph L. Royster, MD, Purcell
Earl Smith, Jr., MD, Tulsa
Leo J. Starry, MD, Oklahoma City
Richard E. Stone, MD, Ada

CLOSING SESSION

I. CALL TO ORDER:

The Closing Session of the 72nd Annual Meeting of the House of Delegates was called to order by the Speaker, S. N. Stone, MD at 2:45 p.m. on May 5, 1978, in the Skirvin Plaza Hotel, Oklahoma City.

II. INVOCATION:

Donald Carter, MD, Oklahoma City, delivered the invocation.

III. REPORT OF THE CREDENTIALS COMMITTEE:

Thomas E. Rhea, MD, Chairman of the Credentials Committee, announced a quorum was present. There were 90 Delegates present.

IV. PRESENTATIONS:

A. Doctor Marvin K. Margo presented a gift of appreciation to Mrs. C. S. Lewis, Jr., for her support and dedication during Doctor Lewis' term as OSMA President.

B. AMA-ERF checks in the amounts of \$23,108.83 and \$1,159.00 were presented to

Dr Thomas Lynn, Dean of the OU College of Medicine, by C. S. Lewis, Jr., MD.

Doctor Lynn expressed his appreciation on behalf of the OU College of Medicine to the OSMA and the OSMA Auxiliary for their continued support.

C. The A. H. Robins Physicians Award for Community Service was presented to Hillard E. Denyer, MD, Bartlesville, by Dr J. B. Eskridge, III. Doctor Denyer thanked everyone for this award.

D. The Sandoz Medical Journalism Award was presented to *The Journal of The Oklahoma State Medical Association* for excellence in design and editorial content. The award, plus a \$500 check, was presented by Mr. John Cole from Sandoz Pharmaceutical Company in Memphis, Tennessee, to Dr Mark R. Johnson, Editor.

E. A plaque was presented to C. S. Lewis, Jr., MD, by Dr Marvin K. Margo commemorating an outstanding year of service as President of the OSMA.

V. REFERENCE COMMITTEE REPORTS:

All reports considered by the House of Delegates are attached and approved and made a part of these minutes.

REPORT OF REFERENCE COMMITTEE NO. I:

Presented by: Elvin M. Amen, MD, Bartlesville

Reference Committee No. 1 approved the following items without amendment:

Item I. Report of the Council on Medical Services

Item II. Report of the Council on Members Services

Item III. Report of the Council on Governmental Activities

Item IV. Special Report of the Physicians Care Committee

Item V. Report of the Grievance Committee

Item VI. Special Report of the Oklahoma Utilization Review System (OURS)

Item VII. Special Report of the Underwriting Control Plan

Item VIII. Special Report on Malpractice Indemnity Funds

Item IX. Special Report of the Task Force on Cost Containment

Item X. Special Report of the Workers Compensation Task Force

Item XIV. Resolution No. 9 — Oklahoma Utilization Review System

Item XV. Late Resolution No. 14 — Community Hospitals

Item XVI. Late Resolution No. 15 — National Commission on the Cost of Medical Care
Reference Committee No. 1 approved the following items as amended:

Item XI. Resolution No. 2 — Publication of Medicare Reimbursement Lists

Line 18 — funds. *That unassigned funds should be published beside the name of the patient receiving the reimbursement.*

Item XII. Resolution No. 4 — Reinstatement of AMA's Sports Medicine Committee

Line 12 — hereby *directs* the Board of Trustees . . .

Item XIII. Resolution No. 8 — Inappropriate JCAH Requirements for Hospital Accreditation

Line 9 — after the words "modified to" *include standardization of evaluation criteria which would result in uniform inspections, and be it further*

RESOLVED that the JCAH be directed to return to its founding principal of accreditation for quality patient care.

REPORT OF REFERENCE COMMITTEE NO. II:

Presented by Edward K. Norfleet, MD, Tulsa
Reference Committee No. 2 approved the following items without amendment:

Item I. Report of the Council on Professional and Public Relations

Item II. Report of the Council on Public and Mental Health

Item III. Report of the Council on Scientific Assembly

Item IV. Report of the Council on Medical Education

Item V. Special Report on Medical School Endowment for Continuing Medical Education

Item VI. Resolution No. 1 — Sexual Reassignment Surgery

Item VII. Resolution No. 6 — Compulsory Continuing Medical Education

Item IX. Resolution No. 11 — Requiring Immunizations of Children in Child Care Facilities

Item X. Resolution No. 12 — AMA Public Relations Program

Item XI. Resolution No. 13 — Health Education in Schools

Reference Committee No. 2 approved the following item as amended:

Item VIII. Resolution No. 10 — Rural Physician Manpower

Page 1, Lines 15 & 16: Association *supports the efforts of previous resolutions of the Oklahoma State Medical Association's Board of Trustees to:*

Page 1, Line 19: 2. Assist in the recruitment of physicians *and their families* for rural Oklahoma; and

Delete Page 2, Lines 3 & 4: *RESOLVED, That the Board present a full report of its findings to the House of Delegates at its meeting in 1979.*

Reference Committee No. 2 referred Resolution No. 6 to the House of Delegates with no recommendation. Dr Kent Braden submitted an amendment to Resolution No. 6 which was approved by a vote of the House of Delegates. The amendment reads as follows:

Page 1, Lines 1-22 DELETE; Page 2, Lines 1-28 DELETE; Page 3, Lines 1-4, DELETE. Substitute the following wording:

(1) That the House of Delegates go on record as being totally opposed to relicensure in any form, from any source.

(2) That the House of Delegates go on record as being totally opposed to National Health Insurance in any form, from any source.

(3) That the OSMA be instructed to use all efforts and means to the bitter end to insure these resolves.

(4) That CME be continued as it now is for a period of three years.

(5) That at the end of that period and prior to the OSMA meeting of 1981 that a self-addressed, stamped post card with the two questions

—I favor continuing CME as mandatory

—I favor CME be changed to a voluntary basis
be sent to every member of OSMA.

(6) That the cards not be signed, so each physician may answer as his conscience dictates, without fear of peer pressure.

(7) That the regional and County Medical Societies Boards of Directors be assigned the task of insuring a return card from each member.

(8) That the OSMA be given the cards and tabulate the results.

(9) That the results be presented to the House of Delegates, and the House of Delegates be instructed to vote into policy the majority vote.

NO. III: REPORT OF REFERENCE COMMITTEE

Presented by Thomas Lynn, MD, Oklahoma City.

Reference Committee No. 3 approved the following items without amendment.

Item I. Report of the President

Item II. Report of the President-Elect

Item III. Report of the Board of Trustees

Item IV. Supplemental Report of the Board of Trustees

Item V. Report of the Treasurer

Item VI. Report of the Council on Planning and Development

Item VII. Resolutions No. 3 and 5 — Compulsory AMA Membership

Item VIII. Report of the Constitution and Bylaws Committee

Item IX. Resolution No. 7 — Appreciation to Scott Hendren, MD

The Speaker of the House then recognized Dr Carl Guild, Bartlesville, who asked to be allowed to speak to Resolutions No. 3 and 5. Dr Guild presented the results of a poll taken to determine whether or not Washington County physicians were in favor of compulsory AMA membership. Some discussion followed, after which a vote was taken to see whether or not the House approved the recommendation of Reference Committee III, which was to *not* adopt the resolutions. The vote was 75 for approval and 16 against.

Dr Scott Hendren expressed his personal appreciation to the Oklahoma County Society for submitting Resolution No. 7 and to the House for accepting it.

VI. ELECTION OF OFFICERS:

The following officers were elected by acclamation:

William Leebron, MD, Elk City, was elected to the office of President-Elect.

Floyd F. Miller, MD, Tulsa, was elected to the office of Vice-President.

S. N. Stone, MD, Oklahoma City, was re-elected Speaker of the House of Delegates.

George H. Kamp, MD, Tulsa, was elected to the office of Vice-Speaker of the House of Delegates.

M. Joe Crosthwait, MD, Midwest City, was elected to the office of Delegate to the AMA, Position II.

Rex E. Kenyon, MD, Oklahoma City, was elected to the office of Alternate Delegate to

the AMA, Position II.

Orange M. Welborn, MD, Ada, was elected to the office of Alternate Delegate to the AMA, Position III.

After a vote of the House members, *Harlan Thomas, MD*, Tulsa, was elected to the office of Delegate to the AMA, Position III. Dr Thomas was opposed by E. N. Lubin, MD, Tulsa.

VII. ELECTION OF TRUSTEES AND ALTERNATE TRUSTEES:

The following Trustees and Alternate Trustees were elected by acclamation.

Trustee District X: Haskell, Hughes, Latimer, LeFlore, Pittsburg & Seminole

Alternate: D. R. Rumph, MD, McAlester.

Trustee District XI: Atoka, Bryan, Choctaw, Coal, McCurtain & Pushmataha.

Trustee: Thomas Rhea, MD, Idabel

Alternate: Preston Bagley, MD, Antlers

Trustee District XII: Carter, Garvin, Johnston, Love, Marshall, Murray & Pontotoc

Trustee: Clarence P. Taylor, MD, Ada

Alternate: James V. Miller, MD, Ardmore

Trustee District XIII: Caddo, Comanche, Cotton, Tillman, Grady, Jefferson & Stephens

Trustee: A. Craig Roberson, MD, Anadarko

Alternate: William A. Matthey, MD, Lawton.

Trustee District XIV: Greer, Harmon, Jackson, Kiowa & Washita

Trustee: Lowell N. Templer, MD, Altus

Alternate: Phillip N. Kingery, MD, Mangum

VIII. ANNOUNCEMENTS OR NEW BUSINESS:

Doctor Armond H. Start, Oklahoma City, addressed the House and asked for their help in finding a physician who would be willing to serve the inmates of the state of Oklahoma.

Doctor Stone expressed his appreciation to Vice-Speaker Jack Fetzer, MD.

He then announced that the 1979 OSMA Annual Meeting will be held May 2-5 in Tulsa at the new Williams Center.

IX. ADJOURNMENT:

The 72nd closing session of the OSMA House of Delegates adjourned at 4:05 p.m.

Recorded by Judy Lake.

Reference Committee #1

Report of the
COUNCIL ON MEDICAL SERVICES
May 3-6, 1978
(APPROVED)

INTRODUCTION:

The goal of the Council is to effectively carry out the duties of studying, making decisions and formulating activities with respect to the provisions of adequate medical care, including, but not limited to, the design or evaluation of all types of health care delivery systems, health planning, the financing of medical services and its impact on the quality of patient care, the social aspects of health, internal peer review mechanisms, and the appraisal of all external programs which affect the cost or quality of medical care.

REVIEW OF ACTIVITIES:

A constant concern of the Council has been that of not having a sufficient number of members present at meetings to constitute a quorum. It was a suggestion that those members present justify a quorum, provided all members were adequately notified of the meeting well in advance, and the business be conducted on majority votes of those members present. The Council has worked with a variety of health related organizations to monitor their operations and their affects on the costs of medical care and physicians in the State of Oklahoma. We have seen great changes in the past year in the health planning process in Oklahoma, particularly in the areas of the Health Systems Agency and their tasks of finalizing the Health Systems plan and Annual Implementation Plan for the State of Oklahoma. In their review process, many hours were spent, with more to come, on the proposed City of Faith Hospital of Mr. Oral Roberts.

The Allied Health Careers organizations and mainly the physician placement process has been very active, considering they have fought financial problems and the changing of executive directors twice. We have also seen some new innovations in the emergency medical system and worker's compensation laws in our state, and these are areas which are just beginning to produce and need attention. The Council also feels some giant strides have been made toward statewide acceptance of the uniform insurance claim form. Blue Cross and Blue Shield, the largest third party carrier in the state, has agreed to use the AMA form. However, more work is needed to have coding systems standardized throughout Oklahoma. OSMA would like to see the five digit coding system used.

The most active function of the Council has

been through its Committee for Peer Review. This committee has been very busy, approximately 153 cases were seen and proper action taken over the last year.

The Council deals basically with organizations or groups on a state level and most of our work is generated in this direction. However, the Council did recommend to the OSMA House of Delegates last year that a resolution be presented to the AMA House of Delegates to reinstate the AMA's Council on Sports Medicine. This was submitted to the AMA and rejected during the June, 1977 session of the House of Delegates.

OBJECTIVES:

The main objective of the Council for the year 1978-79 will be to maintain and continue basically the same programs that are presently in effect. There may be some slight changes in these programs as we continue to experiment with ways to attain better results in monitoring organizations and working with them and keeping our membership apprised of what is happening. Another objective of the Council is to spend more time with some of the organizations, but due to the lack of staff and time, have been neglected somewhat in the past.

It is very important that the Peer Committee continue to function as adequately as it has in the past. We do not foresee any change in the process; however, there will be a new chairman this year. Barney J. Limes, MD, will assume this duty from Tony G. Puckett, MD, who has been so faithful and diligent in this important area of OSMA business. Doctor Puckett's time is just too scarce because of his newly elected office as President of the Oklahoma County Medical Society. The Council wants to go on record to express its gratitude to Doctor Puckett and the physicians who served with him on this committee.

With the advent of the Health Systems Agency, Health planning has become more structured. Health guidelines have been passed and constant monitoring of this situation is needed. The Council feels very strongly that the existing system does not adequately meet the needs of all. When a new rule or guideline is passed, it appears to be geared toward either the large institution and city or the very small institution and town. We should push for changes in the Health Systems Plan to identify and address the need of the intermediate size institution and community.

The Emergency Medical Services in the state are beginning to flourish since the passage of the Governor's Emergency Medical Services Bill last year. The Emergency Medical Physician Program at the University of Oklahoma has become very active since the acquisition of a physician, on a full-time basis, who specializes in Emergency Medical Service. In the past there has been a problem of what to do when the only physician in a community becomes incapacitated and cannot work. OSMA has been asked to help support a program of hiring a physician to work in the OU Emergency Physician Program. His job would be to go into these underserved areas until the local physician could return to work. The Council supports the program in concept, but cannot recommend that OSMA contribute financially to the support of someone else's program. Another reason for increased EMS activity is the creation of the Oklahoma Emergency Medical Services System I Board, which primarily services the Southeastern portion of the state.

It appears that there will be a change in the physician placement service this year, but the Council will continue to support the Council for Health Careers and their allied health placement service.

A couple of other areas the Council feels are important in order for us to attain the goals we have set, are more efforts in the Sports Medicine Committee and the Committee on Laboratory Quality, and the creation of a Council of Presidents of the Allied Medical Professions.

RECOMMENDATIONS:

1. It is anticipated the Committee on Peer Review will continue to be very active and continue in its same programs.

BUDGET REQUIREMENT \$500.00

2. Even though the physician placement is going to be handled elsewhere, it is still the Council's feelings that the Allied Health Placement Service of the Council for Health Careers is extremely important.

BUDGET REQUIREMENT \$2,000.00

3. A task force has been created to work on

the problems involving the Worker's Compensation Law. A joint effort of organized medicine and the legal profession is underway to create some acceptable guidelines for the State Industrial Court to use. When these have been completed a future expense is expected to incur in our efforts to make this information known to our membership.

BUDGET REQUIREMENT \$500.00

4. There is still considerable interest in Sports Medicine and the Council has encouraged its Council on Sports Medicine to participate in any programs that are applicable.

BUDGET REQUIREMENT \$500.00

5. There also appears to be considerable interest on the part of the State physicians for programs on office and personnel management. The Council is anticipating providing socioeconomic programs for physicians and their office managers.

BUDGET REQUIREMENT \$500.00

6. It is also recommended that a joint effort be made by this Council and the Council on Governmental Activities to create a study group to monitor the activities of the Health Systems Agency, the implementation of Health guidelines and the actions of the Allied Health extenders, ie; physician assistants and nurse practitioners, and report pertinent information to the membership.

Respectfully submitted,

William M. Leebron, MD, Chairman
Robert G. Perryman, MD
Donald L. Cooper, MD
Richard Taliaferro, MD
John A. Blaschke, MD
Michael J. Haugh, MD
Stephen Parks, MD
Tony Puckett, MD
Galen P. Robbins, MD
Stanley R. McCampbell, MD
Robert R. Hillis, MD
George M. Brown, Jr., MD
Roger V. Haglund, MD
Maurice C. Gephardt, MD
Jack D. Fetzner, MD

Report on the
COUNCIL ON MEMBERS SERVICES
April 8-9, 1978
(APPROVED)

INTRODUCTION:

Negotiating and securing quality benefits for association members are the principal goals of the Council on Members Services. Insurance programs — both life and casualty, including pension benefit plans — are all within the purview of this Council, as are association-sponsored travel programs and membership recruitment. In addition, the Council maintains liaison with the OSMA auxiliary, medical residents and students, and provides services to constituent societies of OSMA. Personal association services for members, such as counseling and the adjudicating of disputes, are referred to committees under the jurisdiction of the Council.

REVIEW OF ACTIVITIES:

The Council has continued to sponsor a wide range of benefit programs for association members. Following is a brief summary of OSMA programs:

MALPRACTICE INSURANCE — The 1978 program is written through the Hartford Insurance Companies. It is one of the best programs in the nation, which features limits from \$100,000 to \$5,000,000. Coverage is on an occurrence basis and the Association has considerable control over underwriting (see special report), cancellations, and premium development. Two thousand, eight hundred and fifty-eight physicians are enrolled in the program, paying premiums of 5.75 million dollars. Enrollment is limited to OSMA members or special affiliates who agree to abide by OSMA underwriting and peer review procedures and pay an underwriting and management fee. In addition to the malpractice coverage, there is an optional personal protection policy. One thousand, two hundred and forty-nine physicians have purchased the coverage.

GROUP LIFE INSURANCE — Since 1956, the Association has sponsored a group life insurance program with the Massachusetts Mutual Life Insurance Company. In the past ten years, enrollment has decreased significantly. For the past year the Association and the managing agency, J. Hawley Wilson Agency, have participated in a major recruitment campaign. However, enrollment decreased slightly from 216 in 1977 to 215 in 1978. The program is in

jeopardy because the average age of the insured is 53. The insurer is a mutual company, which has resulted in major dividends during the past few years, an average of 25%. The 215 physicians enrolled are paying premiums of \$55,550.00 for a total coverage of 4.6 million dollars.

GROUP HEALTH AND MAJOR MEDICAL INSURANCE — The health insurance plans for physicians and their employees have been underwritten by Washington National since 1972. Enrollment in the plan was never very high (250 at the highest point) and experience has been extremely bad, sufficient to cause the company to issue a notice of nonrenewal in 1978. Health plans sponsored by other medical organizations are experiencing similar difficulties. The problems apparently involve many factors unique to voluntary associations; most notably the ability of voluntary entrance and exit from the program. The inability of physician members to secure adequate coverage resulted in a survey by the Council to ascertain interest in an association self-insurance plan. The response to the survey indicates a large number of OSMA members are having difficulty purchasing insurance and are interested in an OSMA sponsored plan of some kind.

DISABILITY INCOME — This program is written through the Commercial Insurance Company of New Jersey, replacing Washington National who requested a substantial rate increase in 1977. Coverage and rates negotiated with Commercial are the same as Washington National without the rate increase. Commercial has received endorsements from 28 other state medical associations. Since the changeover, there has been a slight decrease in enrollment from 469 to 447, which is probably attributable to attrition. The company plans a major enrollment campaign during the months of April and May.

OVERHEAD EXPENSE PROGRAM — This coverage is written through the Combined Insurance Company of Chicago who replaced CNA, the underwriter through May 1, 1977. The insurance company conducted a major solicitation program and enrollment was increased by 33.5%. Apparently there are approximately 200 participants. Rates and coverage are comparable to the CNA plan prior to the increased rate request.

OSMA PENSION PLAN — In 1976 the OSMA established a master retirement trust

plan for physicians who wish to acquire any one of a variety of eligible pension plans. The J. Hawley Wilson Agency is the program manager and investments are handled by the First National Bank & Trust Co. of Oklahoma City, Oklahoma. Currently, there are 17 sponsored plans involving 19 physicians, with a total fund value of approximately \$400,000.

TRAVEL PROGRAMS — During the past year the Association sponsored tours to London to study the British Health System, Europe, the Orient, Switzerland, and South America. A total of 370 physicians and their wives traveled on sponsored tours which provided approved educational courses. Companies selected to manage our travel programs pay all expenses of promotion and assume full financial responsibility for the entire tour. OSMA sponsors tours to secure travel discounts for its members.

RESIDENT AND STUDENT LIAISON — The Council has continued its policy of maintaining a close relationship with residents and students. The Association annually provides financial assistance to both organizations for participation in their national activities. In addition, the OSMA staff participates in programs designed specifically for residents and next year will conduct two special seminars for residents of Oklahoma City and Tulsa.

There are 675 medical students enrolled in the Oklahoma University Medical School and approximately 508 residents in post-doctoral programs. 214 residents are members of OSMA. The Council plans a major campaign to solicit membership of the residents and recently published a membership brochure which will be used in this effort.

PHYSICIAN COMMITTEE — This special committee works with doctors who have personal, professional, mental or physical problems. There have been numerous confidential sessions with physicians who have unique problems.

MEMBERSHIP RECRUITMENT — There are currently 3,572 physicians residing in and holding a valid license to practice in Oklahoma. 2,982 are members of OSMA, a membership increase of 283 since last year. If the association membership surpasses 3,000 during the calendar year 1978, OSMA will be eligible for another delegate to the AMA House of Delegates. While progress in membership is

obvious, there are still physicians in the state who are eligible who are not members of OSMA.

OTHER ACTIVITIES — Members of the Council have been actively involved in designing risk management programs, educational sessions for constituent societies on malpractice problems, and the Council staff has worked with the auxiliary throughout the year.

OBJECTIVES:

The Council's basic objectives for 1978-79 are to continue the viable programs within its jurisdiction and to improve those programs that do not provide quality benefits to which our members are entitled. Maintenance of the malpractice insurance program is, by necessity, a high priority; however, several of our other programs need immediate attention — specifically, the group life plan and our health insurance program. The OSMA pension plan has received some support from members, but the limited participation indicates that a thorough review of reasoning for initiating the program is in order. The continued success of the malpractice program depends upon a well-informed group of insured, since our members save millions of dollars as a result of this program. It appears more educational programs should be conducted. More than half of the residents in Oklahoma are not members of OSMA. These young doctors should recognize their responsibilities to organized medicine; likewise, those physicians practicing in our state should be aware of the benefits of belonging to the Association and all eligible non-members should be solicited.

RECOMMENDATIONS:

1. The Council be granted the authority to continue the negotiations for, and the sponsorship of insurance programs for, association members.

2. The underwriting and risk management control responsibilities assumed by the Council in connection with the Hartford malpractice insurance program be officially sanctioned by the House of Delegates (see special report of Council).

3. The House of Delegates approve a review of OSMA Qualified Plans, Inc., with instructions that the Board of Trustees take appropriate action and report to the next meeting of the House of Delegates.

4. Results of the health insurance survey be submitted to the Association's insurance coun-

selors for specific recommendation to be presented to the Board of Trustees for appropriate action.

5. The Council be permitted to continue the sponsorship of travel programs.

6. The Council be authorized to continue its active membership recruitment program.

7. The Council be permitted to continue its support of auxiliary, residents and students activities.

8. The House of Delegates authorize the continued activities of the Physicians' Committee.

BUDGET REQUEST: \$5,000.

Supplemental Report on COUNCIL ON MEMBERS SERVICES GROUP LIFE INSURANCE TRUST

Since its inception in 1956, the Association has sponsored a group life insurance program through Massachusetts Mutual Life Insurance Company for its members. As the insurance needs of our members have changed over this twenty-year period, Massachusetts Mutual Life Insurance Company has offered, at attractive prices, new plans of insurance to meet these needs. As a result, in mid 1977, Massachusetts Mutual Life Insurance Company offered a new \$100,000 basic insurance plan. Approximately 15% of present participants immediately joined this plan.

When their group life plan was first offered, 424 OSMA members immediately became participants. Due to normal attrition, there were 261 participants through 1975. Commencing in 1976, the OSMA Qualified Plan Service Company became the administrator of this plan. That year the first dividend was earned and applied to the premium. Another dividend was earned in 1977 and this year a 25% reduction is offered new 1977-78 participants as well as old participants. This, together with monthly advertisements in *The Journal*, sponsorship of an exhibit booth at the OSMA convention each May, a direct mail program, and solicitation by individual Massachusetts Mutual Life Insurance Company representatives, leads us to believe that the program is sound. The Association is dedicated to provide the best life insurance coverage for the most reasonable price to OSMA members.

There are presently 215 participants covered for \$6,050,270 of life insurance. We anticipate a gross annual premium as of April 1, 1978, of \$68,580, less an earned dividend of \$17,145 for a total premium of \$51,435.

A breakdown by age group is as follows:

Under 30	0
30 - 39	14
40 - 49	56
50 - 59	83
60 and over	62

The trustees are the Association's President, Chairman of the Council on Members Services, and the Executive Director.

Supplemental Report on COUNCIL ON MEMBERS SERVICES RETIREMENT TRUST

In December, 1975, the OSMA endorsed a master retirement trust program for its members. The program was initiated to provide OSMA members with various master retirement trusts adapted to their individual circumstances at substantial savings in installation, administration and trustee costs. The OSMA Qualified Plan Service Company is consultant for the Plan; Massachusetts Mutual Life Insurance Company, the insurance carrier; and The First National Bank & Trust Company of Oklahoma City, the Trustee. The profit sharing, money purchase, and HR-10 master trusts in this program have received IRS approval. The defined benefit approval is still pending.

Since the establishment of the Employees Retirement Income Security Act in 1974, professional people have been reluctant to fund their own pension plans. For this reason, the pension consultants recommended that The First National Bank & Trust Company of Oklahoma City be the Trustee. This appears to have been a wise decision. For the year ending December 31, 1976, the total equity fund of \$6,953,120 realized an annual capital appreciation yield of 16.9%; the fund paid ordinary income equal to 4.7%, for a total annual yield of 21.6%. The fixed fund of \$15,711,844 experienced an 8.1% increase in market value in addition to ordinary income of 7.8%, for a total annual yield of 15.9%. Even with the uncertainties during 1977, the bank yield on both equity and fixed funds was -2.4% and +5.5% respectively, well above the Dow-Jones Industrial Average. In addition, in 1976 the bank was able to provide a savings of 22% on trustee fees. In 1977 a 32% savings was accomplished on a total fund market value of \$389,582.

Early in 1976 the OSMA Qualified Plan Service Company began a direct mail campaign to OSMA members. Specially prepared brochures

were printed for distribution to accountants and attorneys, as well as OSMA members. Seminars were also held to acquaint accountants and attorneys with the significant features of these trusts. Advertising was and still is being done by means of advertisements in *The Journal*, *The Sunday Oklahoman*, the *OSMA Medical Directory*, and sponsorship of an exhibit booth at our May conventions.

The establishment of a retirement plan is not accomplished in one meeting. Several months may be involved in finding the right plan for a particular doctor. Even so, within a two-year period, 17 retirement trusts have been put into effect. These trusts cover 21 OSMA members, as well as our own OSMA and Tulsa County Medical Society employees and the Oklahoma Foundation for Peer Review employees.

The trustees are the Association's President, Chairman of the Council on Members Services, and the Executive Director.

A breakdown by types of retirement trusts established is as follows:

Defined Benefit	12
Profit Sharing	4
Defined Contribution	0
HR-10	1

A breakdown of the member participants by age group is as follows:

30 - 39	3
40 - 49	7
50 - 59	8
60 and over	3

Report of the
COUNCIL ON
GOVERNMENTAL ACTIVITIES
May 3-6, 1978
(APPROVED)

INTRODUCTION:

The goal of the Council is to conduct the legislative program of the Oklahoma State Medical Association. The Council is to review, monitor and act upon Federal and State legislation and regulations of concern to the medical profession or the public health and safety. It is to establish and maintain relationship with Federal and State governmental entities having statutory or regulatory jurisdiction affecting the medical profession's delivery of health care or the public health and safety. In

cooperation with the Association's other councils and committees, it is to communicate the activities of this council with the medical profession. With respect to legislation and regulations and when necessary the Council is to develop policy recommendations for consideration by the Board of Trustees.

REVIEW OF COUNCIL ACTIVITIES:

The Council has reviewed the following Federal legislation:

- (1) Clinical Laboratory Improvement Act;
- (2) Intern and Resident Collective Bargaining Bill;
- (3) Hospital Cost Containment Bills
 - a. Carter proposal,
 - b. Talmadge proposal
 - c. Rostenkowski proposal
- (4) Rural Health Clinic Bill;
- (5) Various HMO bills; and
- (6) Medicare-Medicaid Fraud and Abuse Bill.

The Council has been involved in various HEW regulations such as the National Health Planning, Hospital Construction and PSRO Guidelines.

The State Legislative Committee has reviewed and monitored eight (8) new pieces of legislation this session not including the hold-over bills from last year. The Committee looked at bills involving abortion, mental health, blood procurement, radiology technician licensing and home health care.

John Montgomery has been representing OSMA in Washington for some eight (8) months now. He has been actively involved in numerous projects and activities such as providing OSMA headquarters with any information concerning health legislation and regulations, working with the congressional staff as it relates to the OURS Plan and arranging trips to Washington by OSMA staff to meet with the Congressional delegation.

The Council will meet on April 3 to evaluate John's position and activities and at that time will write a detailed report to be presented to the House of Delegates as to whether the Washington Consultant project should be continued or not.

The Council conducted two (2) Congressional Health Forums last year, one in Oklahoma City with Congressman Mickey Edwards and the other in Tulsa with Congressman Jim Jones. The Council developed the Key-Man project last year but to date has not used this procedure.

OBJECTIVE(s):

The Council on Governmental Activities, in an effort to more closely review and monitor Federal health legislation and regulation, hired John Montgomery to represent OSMA in Washington. He provides OSMA with a monthly report outlining his activities in the area of health and any specific projects assigned to him. He also regularly provides OSMA with updates, synopses and status reports of numerous Federal health bills. All of this information combined, helps the Council to make more informed decisions about the necessary action to be taken on a specific piece of legislation.

The Council on Governmental Activities in an effort to more closely review and monitor State legislation has established a special Legislative Committee to meet on a regular basis during the Legislative session and deal with the bills introduced in the Oklahoma Legislature.

The Council on Governmental Activities, in order to establish and maintain a better working relationship with Federal governmental entities hired John Montgomery to represent OSMA in Washington. He periodically visits the Oklahoma Congressional offices and works to maintain a relationship with, not only the congressman, but all the congressional staff. He also maintains a relationship with the various regulatory agencies such as DHEW.

The Council on Governmental Activities, in an effort to establish and maintain a relationship with Federal governmental entities has conducted health forums with two Oklahoma Congressmen, Mickey Edwards, District #5 and Jim Jones, District #1.

The Council on Governmental Activities, in an effort to establish and maintain a relationship with State Governmental entities, uses Lyle Kelsey, OSMA staff lobbyist and the State Legislative Chairman, as a means to accomplish that goal.

The Council on Governmental Activities, in an effort to communicate their activities with the medical profession has utilized the method of a Newsletter to alert physicians of the legislative and regulative atmosphere.

The Council on Governmental Activities, in an effort to act upon Federal legislation, has developed a Congressional Key-Man approach to better communicate with the Oklahoma Congressional Delegation on specific areas of concern.

The Council on Governmental Activities, in an effort to maintain a working relationship with Federal governmental entities has endorsed two (2) trips to Washington by representatives from OSMA for the purpose of educating the congressmen and their respective staff to the needs and concerns of Oklahoma.

RECOMMENDATIONS:

1. To renegotiate an employment contract with John Montgomery for the year, August, 1978 to August, 1979 (to be supported by special report to the House of Delegates).

Budgetary Requirements \$12,000

2. Council Chairman and OSMA Staff will proceed with contacting surrounding states to secure interest in sharing the Washington consultant's time and expenses. No Budget

3. To continue the State Legislative Committee Activities Budgetary Requirements \$600

4. To conduct two (2) Health Forums during year 1978-79 Budgetary Requirements \$1,000

5. To conduct more liaison trips to Washington due to the effectiveness of the previous visits.

Budgetary Requirements \$4,200 (Six Trips)

6. To produce a regular, quality Federal and State Legislative Newsletter.

Budgetary Requirements \$2,500

(State-bi-monthly)

(Federal - monthly)

7. To work with the Council on Medical Services as to the regulations concerning physician extenders and to make the membership aware of those guidelines. No Budget

8. To maintain Key-Man Index No Budget

Supplemental Report TO THE REPORT OF THE COUNCIL ON GOVERNMENTAL ACTIVITIES

At an Executive session of the OSMA's Council on Governmental Activities held April 3, 1978, the services of John Montgomery as a Washington representative for the OSMA were carefully reviewed. Unanimous vote of the Council was that his services were proving to be extremely valuable to the Association and that the program should be fully funded in the future. This report attempts to outline the reasoning behind this recommendation.

First, it must be remembered that the House of Delegates expanded the jurisdiction of this

Council to include all Federal legislation and regulation without an increase in staff positions at the OSMA office. Although Mr. Montgomery is being carried as a line item budget expenditure, he is functioning in many respects as an OSMA staff member. If staff time allocations to the various councils were made, the total budget item for the Council on Governmental Activities would appear much less.

It was decided at the outset that Mr. Montgomery and the OSMA Council would concentrate its activities on those aspects of National legislation and regulation which have particular pertinence to Oklahoma, leaving broader National issues without a specific impact on the State of Oklahoma to the traditional Washington efforts of the American Medical Association and other National medical groups. We have attempted to follow this policy closely and have achieved a number of successes.

A top general priority was the establishment of close working relationships with members of the Oklahoma Congressional Delegation, the staff of these members, and staff members of various Congressional committees with authority in the health area. Thanks to Mr. Montgomery's efforts, this aspect of the program has been an unqualified success. One year ago, for example, one of our Oklahoma Senators had a private luncheon meeting with a group of oil men and went on record as strongly supporting the various hospital cost control measures introduced into Congress. He stated at that time that we needed to close hospitals in Oklahoma and would not yield on his position even with respect to the University of Oklahoma Health Sciences Center or Mercy Hospital, to say nothing of rural hospitals. Not only is this no longer his position, we have some tangible evidence of that in a strongly worded letter to the Secretary of Health, Education and Welfare supporting efforts of the Oklahoma State Medical Association for rural area relief from the HSA guidelines. Through personal relationships with members of the Interstate and Foreign Commerce Committee in the House, we were able to successfully modify the personnel requirements of the Clinical Laboratory Improvement Act in such a fashion that we believe rural hospital laboratories will be able to continue to operate and, additionally, were able to obtain some extremely favor-

able language in the committee report on the Bill.

In addition to close working relationships with the Congressional Delegation and the committee staffs, we have been able to secure strong support for the Oklahoma utilization review system. It seems clear that the intent of HEW was to terminate the OURS plan and move to a conventional PSRO. We were able to secure very direct and extremely strong representation from Senator Bellmon direct to Secretary Califano on this matter and, additionally, managed to receive equally strong support from Representatives Paul Rogers and Tim Carter.

Unlike all past years, we have consistently been ahead of the legislative and regulatory process in Washington. Formerly, we would receive an urgent telegram or telephone call from AMA headquarters or Washington requesting our support for various pieces of legislation or regulation, always accompanied by an extremely short time frame. This never allowed sufficient opportunity for analysis of the item or for preparation or transmission of an appropriate response. In great contrast, during 1977-78, we had already been well apprised of the situation and have been able to participate effectively with the AMA in these matters.

We have been able to successfully use Mr. Montgomery to establish warm working relationships with certain members of Congress who hitherto had not been generous with their attention. For example, we now have extremely close and effective working relationships with Congressman Jim Jones who sits on the House Ways-and-Means Committee (a particularly important committee for medical legislation).

With respect to regulatory activities, Mr. Montgomery probably saved the state medical association his entire costs by virtue of his exceedingly accurate advice concerning the HSA regulations and their totally unworkable guidelines. Strong consideration was being given by the Council on Governmental Activities to recommend to the Council on Public Relations an intensive (an expensive!) public relations campaign with respect to the HSA guidelines as originally proposed. Mr. Montgomery accurately informed us that this step would not be necessary as, in fact, it was not.

Another exceedingly valuable contribution made by Mr. Montgomery relates to his ability to schedule into Washington and make produc-

tive use of the time of the OSMA officials and staff. While the OURS program probably represented the principal example of such effectiveness in 1977-78, a variety of other legislative and regulatory and administrative details were handled very well in this fashion.

In summary, we have been kept extremely well informed on a daily basis as to legislative and regulatory happenings in the Federal Government, have had ample opportunity to protect the interests of patients in Oklahoma, and have achieved concrete results. We have not had to call upon our legislative Key-man program. We have not had to employ an additional staff member at OSMA headquarters, we have not misdirected funds because of a lack of understanding in the Washington setting, but we have conserved the time and resources of both the OSMA staff and of its members. Positively, we have achieved a great deal.

For the reasons stated above, the OSMA Council on Governmental Activities strongly recommends the continuation of the "Man in Washington" program.

Report of the
PHYSICIANS CARE COMMITTEE
May 3-6, 1978
(APPROVED)

INTRODUCTION:

The Physicians Care Committee should make itself available to Counsel with physician members who are having personal, professional, mental or physical problems of a significant nature. Such counseling shall be unofficial and shall not be considered disciplinary. Physician members of the Association may request such counseling or this Committee, OSMA Council, another physician member or component society may offer to counsel with a physician member. Counseling sessions are to be considered privileged and no written record or minutes will be taken.

OBJECTIVES:

The Committee's main objective is to *find* the impaired physician and offer some type of help in order to restore him to a useful member within the profession and society. The Committee also has a purpose to educate all members of the profession as to the potential hazards present within the profession that can

lead to many areas of personal neglect and ruin.

RECOMMENDATIONS:

1. The Committee shall communicate to the medical profession the purpose and availability of the OSMA Physician Care Committee.

2. The Committee shall make better use of the State Board of Medical Examiners office for leads into possible physician abuses.

3. The Committee shall explore various opportunities to educate physicians and future physicians (medical school) as to early warning signs of problems.

4. The Committee would like to purchase the audio visual program on "Impaired Physician" from the Washington State Medical Association at a cost of \$100.00.

Report of the
STATE GRIEVANCE COMMITTEE
May 3-6, 1978
(APPROVED)

INTRODUCTION:

The Grievance Committee is a standing OSMA Committee organized for the purpose of resolving complaints against physicians brought by physicians, patients, committees of the Association or agencies, institutions or organizations that have cause to request Association assistance in adjudicating complaints.

The Committee has the responsibility of thoroughly investigating the complaint and making the decision as to the resolution of the matter or referral to the Association's Board of Trustees who, sitting as a judicial counsel, will act as the final appellate body of the Association. In the event referral to the Board is made, the Grievance Committee shall act as presenter of fact.

REVIEW OF ACTIVITIES:

Last year the House of Delegates authorized enlargement of the Committee from the five immediate past presidents, adding two members to be appointed by the President. The Committee adopted a Rules of Procedure that require the referral of complaints against physicians to the county medical society from which the complaint originated. The Committee requires that the complaint be heard at the county level within thirty (30) days.

Cases received by the Committee are registered in a special log that includes the following information: Date of receipt, physician's name, patient name, origin of complaint, date of referral to county society, date reply is received and final disposition.

During the past year the Committee has received thirty-seven (37) cases. Nineteen (19) have been closed, one (1) referred to the Osteopathic Association, one (1) referred to the Board of Medical Examiners—non member, ten (10) have been referred to county medical societies for disposition and are pending and six (6) are pending the next meeting of the State Grievance Committee.

OBJECTIVES:

The objective of the Committee is to mediate, in an expeditious manner, complaints against physicians. Hopefully, the resolution will be to the mutual satisfaction of the complainant and the physician thereby enhancing the Association's public and intra-professional relations. The Committee works with the State Board of Medical Examiners, other professional boards, eight (8) State and Federal agencies, hospitals and individuals in an effort to accomplish its objectives. Specific grievances have been worked out with several of the above and others are being explored.

RECOMMENDATIONS:

1. That the logging procedure be continued for complaints filed;
2. That method of referral to the involved county society be continued and adhere to the thirty (30) day requirement for the county society disposition and reply.
3. Due to the small size of the Committee and the sporadic nature of the cases filed, it is recommended that a telephone conference call be used by the Grievance Committee to expedite the adjudication of the cases; and
4. That the Greivance Committee shall explore the use of other agencies and entities to better investigate alleged complaints.

Special Report
of the
OKLAHOMA FOUNDATION
FOR PEER REVIEW, INC.
(APPROVED)

During the past year the Oklahoma Founda-

tion for Peer Review has completed two projects: The preparation of a Professional Standards Review Organization plan for the state of Oklahoma, and 15 months operation of the Oklahoma Utilization Review System. Each of the two will be reported separately below.

OKLAHOMA UTILIZATION REVIEW SYSTEM:

On April 30, 1978, the Oklahoma Utilization Review System . . . known as OURS . . . was completed after 15 months of operation.

Although the results of the impact of the full 15 months have not been analyzed at this time, the first 12 months were extraordinarily impressive.

According to Hillard E. Denyer, MD, Foundation President, "The actual savings generated by the OURS plan during its first 12 months could be as high as \$15.1 million. It's difficult to arrive at an exact figure since we are talking about savings through *non-utilization*. These are invisible dollars, represented by charges that were never incurred. We cannot point to an overall decrease in cost of Medicare and Medicaid. We can only cite the assumption that if the two programs had continued to grow at the pre-OURS program rate, this much more money would have been expended over and above that which was actually expended."

The actual savings were brought about by reducing the actual number of hospital claims and number of hospital days being utilized per 1,000 possible Medicare and Medicaid beneficiaries. While the number of beneficiaries had risen from 528,000 to 556,000, the number of claims had decreased from 179,000 to 174,000. During the same 12 month period the total number of hospital days utilized increased from 1,558,000 to 1,564,000. However, when compared to the increased number of possible beneficiaries the actual utilization decreased from an average of 2,951 days to 2,866 days per 1,000 possible beneficiaries.

Another significant indication that the plan worked well was the dramatic decrease in the number of Medicare claims being totally denied as not medically necessary by the Medicare fiscal intermediary. In the year prior to the OURS plan there were 2,260 claims denied, but this number dropped to 1,497 during the first 12 months of OURS. During the same time period the number of claims partially denied, i.e., claims in which only a part of the hospitalization was declared not medically

necessary, decreased from 508 to 195, down over 61 percent.

Only a week before the 12 months' results were announced, HEW Secretary Joseph Califano had cited the OURS plan as *one of the nation's best PSRO's*. The commendation came while the Secretary was speaking to a United States Senate Committee.

While announcing the first year's results, Doctor Denyer stated, "The OURS project has proven that physicians and hospitals can and will police their own activities without heavy government regulations and regimentation. Our approach allows the local hospital to control its own utilization, but gives us an external monitoring plan that will identify problem areas and allows us to offer assistance in their solution at the earliest possible time." He went on to state that the OURS plan also proved that Oklahoma physicians were not afraid to initiate innovative approaches to problems of national concern.

The OURS plan began formal operation on February 1, 1977, with a total budget of slightly less than \$200,000. The budget was calculated to allow the plan to operate for 12 months.

In late November it became obvious to Foundation personnel that the Professional Standards Review Organization plan for Oklahoma would not be ready for operations in time to coincide with the end of the OURS project, January 30, 1978. In order to prevent a gap from developing between the end of OURS and the beginning of PSRO, a gap that could require Oklahoma hospitals to begin doing utilization review according to the Federal Regulations, the Foundation asked for an unfunded or "no cost" extension of the OURS plan for three months, to April 30.

It was correctly calculated, at the time of the request, that by the end of the 12th month the Foundation would have expended only about \$150,000 of its total budget. Thus, an unfunded extension was possible.

By operating the entire OURS plan for over 15 months on less than \$200,000, Oklahoma produced an extremely cost effective program.

PROFESSIONAL STANDARDS REVIEW ORGANIZATION:

During the past 12 months the Foundation put the finishing touches on its Professional Standards Review Organization (PSRO) plan for Oklahoma. Throughout the two and one-half year planning process, the Oklahoma

Foundation had repeatedly told HEW it was its intention to submit the OURS plan as the concurrent review or utilization review portion of its PSRO plan.

There was some anxiety on the part of Foundation officials that HEW would accept the OURS approach, since it did not agree with the PSRO model plan HEW was advocating. However, when the final PSRO contract arrived at the Foundation office it stated that the Oklahoma PSRO could conduct its in-hospital review "in accordance with the Oklahoma Utilization Review System described in (the) formal plan." This phraseology officially authorized the Foundation to conduct the concurrent review portion of PSRO according to the OURS program.

The formal changeover from OURS to PSRO operation was accomplished April 30. From that date on Oklahoma hospitals will be conducting review under the auspices of the Foundation's PSRO contract. The short changeover period of about three to four months will take place before the entire PSRO plan becomes fully operational.

A series of personnel training seminars will be conducted in late May by the Foundation for hospital administrators, review coordinators, medical records personnel, and claims processing personnel.

Oklahoma's PSRO plan is unique. The computerized statistical audit mechanism created for the OURS project, and transferred to PSRO, is the primary difference between Oklahoma's approach and that being promulgated by HEW.

Under HEW's model PSRO the determination of whether or not a given hospital is actually conducting a review, and the quality of that review, is based on the collection of the "PSRO Hospital Discharge Data Set", known as PHDDS. Under the model program the PHDDS information is sent directly from the hospital to the local PSRO where it is computerized, evaluated, summarized and then forwarded to HEW in the computer tape form.

For the standard PSRO, operating under the model, the PHDDS is the only source of information about a hospital's internal PSRO activities. However, under the operation of the Oklahoma plan, all of the data on a hospital's claim form for each Medicare and Medicaid admission and discharge is available for review.

One of the most severe criticisms leveled

against the PSRO program nationwide is that it calls for the creation of a separate and duplicative computer processing system to collect and analyze the PHDDS data. Thus, there are two extremely expensive computerized data processing systems . . . one for PHDDS data for PSRO purposes, and a separate system for Medicare and Medicaid claims processing.

The Oklahoma PSRO plan eliminates the need for this separate and duplicative processing system. By utilizing data already in existence, one very distinct economic advantage comes about. Computer costs alone in the standard PSRO run as high as \$.75 per claim, while the cost of processing under the OURS program should be less than \$.25 per claim.

The Oklahoma Foundation plan places great emphasis on profile analysis and Medicare Care Evaluation Studies to assure quality medical care. A medical education specialist will be employed by the Foundation to work with hospitals in conducting Medical Care Evaluation Studies. In addition, this professional will work with appropriate hospital, medical, nursing and para-medical organizations interested in the design and conduct of educational programs, especially programs responsive to the problem areas discovered by the evaluation studies.

Under the HEW PSRO model, at the beginning of a PSRO operation all hospitals are required to review, on a case by case basis, each and every Medicare and Medicaid admission. The Oklahoma plan allows the PSRO to begin operation by utilizing a "focused review" mechanism based on automatic certifications under the OURS plan.

Such a focused review system reduces the two highest cost components in an individual hospital's PSRO compliance by a substantial amount, and reduces the overall cost of PSRO. If a Review Coordinator in a hospital that has good utilization in the past is allowed to automatically certify non-controversial cases, this should reduce the footwork and paperwork necessary on her part and all but eliminate the time and cost of the physician advisor and Utilization Review Committee.

At this time (early May, 1978) the Foundation is in the process of expanding its staff from five fulltime and one halftime employee up to a possible 15 people. This will include five Regional Review Coordinators to work out in the

state, an educational specialist, and a business manager for the Foundation.

Because of the added responsibilities required by the PSRO law, the Foundation's budget for its first year of PSRO operation is considerably higher than the budget for the OURS project. However, the total budget of \$521,306 (which includes some one-time first year startup costs such as equipment and furniture purchases) should still result in Oklahoma having one of the most cost effective of all PSROs in the country. Oklahoma anticipates a unit cost of between \$8 and \$10 per Medicare and Medicaid claim, while other PSRO's are experiencing costs of \$16 to \$18 per claim, and in some instances even higher.

The Oklahoma plan is gaining national notoriety. In early April the Executive Director of the Foundation was given a tentative invitation to appear before the National Professional Standards Review Council during its May meeting to explain the Oklahoma plan. In addition, the plan was presented to all PSRO organizations in the Southern and Southwestern portions of the United States during an April 6 meeting in Memphis, Tennessee, and to the Medical Directors and Physician Officers National Meeting on April 14 in Charleston, South Carolina.

During a March press conference to announce the results of the first 12 months of the OURS project, Foundation President Hillard E. Denyer, MD, pointed out that the OURS plan (and Oklahoma's PSRO) were a result of the voluntary cooperation of Oklahoma's Medical Doctors, Osteopathic Physicians, and the hospitals.

Because of their special support the Foundation wishes to extend thanks to the following:

Oklahoma State Medical Association
Oklahoma Osteopathic Association
Oklahoma Hospital Association

MEMORANDUM

To: Board of Trustees, House of Delegates
From: C. Alton Brown, MD, Chairman, Council on Members Services
Subject: Special Report, Underwriting Control Plan

(APPROVED)

Date: May 3, 1978

Attached hereto is an Underwriting Control Plan jointly developed by our council and representatives of The Hartford Insurance Company. It is a procedure by which physicians de-

siring to enroll and enrolled in the association-sponsored malpractice insurance program are evaluated for insurance purposes.

Our council has approved the plan and recommends that it be adopted by the Board of Trustees and House of Delegates, thereby honoring a portion of our master contract with The Hartford.

UNDERWRITING CONTROL PLAN Oklahoma State Medical Association Professional Liability Program

I. GENERAL

A. *Purpose:* As a function of the Risk Management/Loss Control service to be provided by the Oklahoma State Medical Association (Association) to The Hartford Fire Insurance Company (Hartford), this Underwriting Control Plan (Plan) will be followed by the Association's Underwriting Committee (Committee) in developing recommendations for Hartford's use in underwriting the Association's Professional Liability Insurance Program.

B. *Authority and Responsibility:* While the Committee's recommendations will normally receive favorable consideration, Hartford retains the final authority and responsibility for underwriting decisions, except for those decisions which are appealed to the Association's Board of Trustees as provided in this plan, in which event the decision of The Board of Trustees shall be final.

II. ORGANIZATION AND FUNCTIONS

A. *Underwriting Committee:* The Association President shall appoint an Underwriting Committee comprised of four (4) physician members of the Association and the Association's Executive Director, who shall be Risk Manager. A physician shall be designated by the Association President to serve as Chairman of the Committee. The Committee shall serve under the direction and control of the Association's Council on Members Services. Liaison representatives from C. L. Frates and Hartford may be invited to attend Committee meetings.

B. *Committee Charge:* The Underwriting Committee shall review the insurability of all physicians eligible for insurance under this Program, such review to include all new applicants for coverage as well as a continuing review of all insured physicians. Underwriting recommendations to the Hartford may include:

(1) Coverage denial or cancellation; (2) Reduction of coverage limits to \$100,000/\$300,000; and (3) Premium surcharge.

Physicians who apply for or maintain insurance coverage must meet the following requirements: (1) Licensed in Oklahoma with predominant practice in the state; (2) Member in good standing of the Association, or a pending applicant for membership; (3) Non-member who meets the Association's requirements as an Affiliate.

C. *Meetings and Reports:* The Committee shall meet at least quarterly, but may function as necessary during interim periods via telephone conference calls. Reports of Committee activities shall be presented quarterly to the Council on Members Services.

D. *Appeals:* A Member of the Association, or an Affiliate, may appeal an underwriting decision which denies or terminates insurance coverage, which reduces coverage limits, which requests practice restriction, or which increases insurance cost through a premium surcharge.

The appeal must be made in writing to the Association's Board of Trustees within ten (10) days after being advised of the underwriting decision, and the Board of Trustees must hear and take action on the appeal within sixty (60) days after receiving written notice. The insurance status of the appellant physician shall remain unchanged while the appeal is in process, and the decision of the Board of Trustees shall be final.

III. NEW APPLICANTS

A. *Review:* All new applicants for Association-sponsored insurance shall be reviewed and approved by the Underwriting Committee, or by the Risk Manager acting within guidelines established by the Committee and approved by Hartford. The Risk Manager may approve coverage for a physician applicant under said guidelines, but may not disapprove coverage without the agreement of a majority of the Committee members.

B. *Physicians Without Prior Practice Experience:* A physician without meaningful practice experience since completion of his professional education may be routinely approved for coverage by the Risk Manager absent any negative information or knowledge; if negative information is known, a background investigation shall be conducted based on appropriate criteria as listed in C below.

C. Physicians With Prior Practice Experience: A physician with prior practice experience since the completion of his education may be approved for insurance only after investigation by either the Underwriting Committee or the Risk Manager. If any of the following situations exist, the Committee will normally deny coverage; if coverage is to be afforded by special consideration, it may be provided only under conditions as described in Section VI of this Plan:

1. Two or more significant reserved, paid or adjudicated liability claims during the past 5 years which were based on demonstrated negligence, aberrant practice or practice beyond the physician's level of competence.

2. Restriction, suspension or revocation of hospital privileges for reasons related to professional competence.

3. Surrender or loss of license to prescribe or dispense narcotics or loss of privilege to prescribe or dispense other scheduled drugs.

4. Current or uncontrolled alcohol or drug abuse problems deemed by the Underwriting Committee to impair professional competence.

5. Criminal conviction involving a felony.

6. Falsification of application for insurance.

7. Any negative finding of a detrimental nature resulting from a background investigation including but not limited to contact with authorities in current or former practice locations, current or former hospital affiliations, current or former medical professional associations or societies, and current or former licensing boards.

D. Use of Binders: Binders may be normally used to expedite coverage for new applicants who have not had prior practice experience since the completion of training and who are otherwise approved by the Risk Manager. Binders may not be issued if:

1. Applicant is not a member of the Association, and is not willing to apply for membership or to become an Affiliate.

2. Applicant has had prior practice experience and the underwriting investigation is incomplete.

3. Applicant is a foreign medical graduate and the underwriting investigation is incomplete.

IV. RENEWALS

A. Periodic Re-Application: Physicians insured in 1978 will be required, prior to the be-

ginning of 1979, to submit new applications. Thereafter, new applications for insurance will be required every third year. Each new application form will be compared to the previous form by C. L. Frates and Company to ascertain the correctness of rate classification.

B. Purpose of Re-Application: Because underwriting will be a continuous process, as presented in the next section of this plan, the periodic re-application function will not normally involve any special activity other than re-assessing changes in practice as they affect rate classifications, or in adjusting the classifications of the insured population of physicians as may be required by new underwriting techniques. However, if a surcharge or termination decision is made by the Underwriting Committee within 60 days of the renewal date, the Committee may, at its discretion, defer the action to coincide with the insurance program's annual renewal date.

V. ONGOING CASE FINDING AND REVIEW

A. Case Finding: The Underwriting Committee will establish liaison with the Oklahoma State Board of Medical Examiners, with other appropriate committees of the Association, with constituent county medical societies and with hospitals, for the purpose of interchanging information relevant to the competency of physicians. High-risk cases so identified will be investigated on a timely basis by the Committee and appropriate decisions will be made regarding the insurability of affected physicians.

B. Annual Loss Review: Each year, the Hartford or C. L. Frates and Company will furnish to the Underwriting Committee the particulars on all physicians having reserved claims or paid losses from the inception of the program or within the past 3 years, whichever is longer. The Committee may request and receive additional information, and based on objective evaluation, it may recommend termination, the assessment of surcharges, or reduced coverage limits.

VI. INDIVIDUAL RISK MODIFICATION PROGRAM

A. General: All physicians who have applied for coverage or who are currently participating in the Association/Hartford professional liability insurance program are subject to coverage denial or cancellation for cause, or they may be

provided coverage by the Underwriting Committee under modified conditions and/or costs as described in this section.

B. Individual Risk Rating Procedure: Measurements to identify high risk physicians are delineated below along with assigned negative points (or ranges of points):

1. Incident(s) or claim(s) which were based on demonstrated negligence, aberrant practice, or practice beyond the physician's level of competence. 10 to 50

2. Restriction, suspension, or revocation of hospital privileges for reasons related to professional competence. 10 to 50

3. Surrender or loss of license to prescribe or dispense narcotics or loss of privilege to prescribe or dispense other scheduled drugs. 20 to 50

4. Health problem which impairs professional competence. 0 to 20

5. Current or uncontrolled alcohol or drug abuse problem deemed to affect professional competence. 10 to 50

6. Failure of accused physician to cooperate with the Committee, Hartford, or with the defense counsel. 10 to 30

7. Failure to promptly report claims or potential claims in a manner which prejudices the defense of such claims. 10 to 30

8. Loss of medical license or felony conviction. 50

9. Disciplinary action or censure by Association or county medical society involving fee complaints, unethical practice, patient rapport problems or like circumstances which could generate liability claims. 0 to 20

C. Premium Surcharges or Cancellations: The Committee, based on the cumulative negative point total assigned to a physician, is required to recommend cancellation or denial of insurance if a physician has a cumulative point total of 50 points. If the points assessed range from 10 to 40, the Committee may recommend that premium surcharges be invoked either singularly or in combination with other penalties (see Paragraph D), as follows:

Total Points	Premium Surcharge	Minimum Surcharge
1. 10 points	25%	\$ 500
2. 20 points	50%	1,000
3. 30 points	100%	2,000
4. 40 points	200%	4,000

D. Alternative Risk Modifiers: In order to achieve optimum underwriting effectiveness, the Committee may recommend the following

alternatives, singularly, in combination with each other, or in combination with premium surcharges as deemed necessary under variable circumstances:

1. The physician's written agreement to accept specified practice restrictions.

2. Reduce physician's coverage limits to \$100,000/\$300,000.

E. Terms of Surcharges: The foregoing premium surcharges will normally apply for a three-year period. The surcharge shall become effective upon 10 days notice and the first period of the 3-year penalty shall end on the last day of the year imposed (even though less than one full year).

A premium surcharge may be modified by the Committee at the beginning of the second or third years, within the following ranges:

1. Second 12 months: 50% to 100%

2. Third 12 months: 0% to 100%

Special Report on OSMA INSURANCE INDEMNITY FUNDS (APPROVED)

INTRODUCTION:

In the past four years OSMA has created two separate indemnity funds for its malpractice insurance programs. The first trust was created in January of 1976 to avoid a substantial rate increase proposed by the INA, and thought to be unjustifiable by the OSMA Council on Members Services. As a compromise to the rate increase, OSMA agreed to establish a stabilization fund which could be drawn upon by the INA in the event losses exceeded the actuarial estimates computed by OSMA insurance counselors.

The other fund was created as a part of the Hartford/Lloyd's of London/OSMA excess limits coverage written in January of 1978. A part of the arrangement with the insurers required a substantial deposit in a local bank from which the letters of credit were issued. Details of the two funds follow.

OSMA - INA STABILIZATION FUND:

This trust was created January 1, 1976, by the OSMA as inducement for INA to continue writing medical malpractice coverage for the OSMA. The funding of the trust was by way of contributions made by members of the OSMA. The amount of the contributions was fifteen (15%) per-centum of the premium developed by the filed rate for each doctor's classification for the year 1975 for \$100,000/\$300,000 limits,

and the contributions were to be made annually for three (3) years, or until the contributions to the fund in the aggregate shall equal or exceed the sum of \$500,000, whichever preceding event occurs last.

As a matter of fact, no contributions were made the second and third years because the concern about malpractice risk *per se* had diminished.

The trust was created for the benefit of INA to cover unanticipated claims which are defined as those claims in excess of the permissible loss and allocated loss expense ratio as used in the INA rate making for the particular policy year which may arise after INA ceases to write malpractice insurance under the OSMA/INA contract.

One half (½) of the funds, less reserves set up for claims, will be returned to the OSMA at the end of the fourth (4th) year following the termination of the OSMA/INA insurance program. This will occur on December 31, 1981.

All funds remaining seven (7) years after the effective date of termination of the program (December 31, 1977) less any reserves for known claims may then be returned to the OSMA.

The money collected was deposited in Certificates of Deposit in the Security Bank and Trust of Midwest City. As of March 9, 1978, the balance of this account was as follows:

Checking Account	\$ 197.00
Savings Account	3,853.69
Certificate of Deposit	215,900.00
Total	\$219,950.69

The Certificate of Deposit is drawing interest at the rate of 6½% and has a maturity date of April 6, 1978. At that time the Trustees will negotiate a new interest rate and re-invest the balance of the Certificate of Deposit at the best obtainable interest rate. Accrued interest is deposited to principal as required by the trust agreement.

The current trustees are as follows:

OSMA — David Bickham

INA — David Perry

At this time, it would appear that there is a good chance a portion of the money in the stabilization fund will be returned to the OSMA.

OSMA — HARTFORD/LONDON DEPOSIT PREMIUM

This fund was established on January 1, 1977, by depositing a portion (\$860,000) of the total premium in the Fidelity Bank in Oklahoma City. The balance of the premium went to London and Hartford. The balance of the premium on deposit in Oklahoma City on March 8, 1978, was \$915,741.84. It is in the form of a Certificate of Deposit and was renewed on March 8, 1978, for one (1) year with an interest rate of 7½%. Accrued interest will be deposited to principal until the fund reaches \$1,060,000 (approximately March, 1980). Afterwards the interest can be deposited to the OSMA general fund.

The final adjustment of the premium will be thirty-six (36) months from the date of the agreement (January 1, 1980).

The adjustment premium on the first layer of aggregate coverage (\$1,500,000) will be adjustable semi-annually from inception to extinction at 100/65ths of incurred losses excluding Costs and Expenses, provided that in no event shall the final premium be less than \$200,000 nor more than \$1,250,000.

"Total incurred losses" shall mean the total sum paid by Underwriters in respect of claims paid under this policy plus the reserves for unpaid claims estimated by Underwriters at the time of the premium adjustment.

At this time it would appear, barring unforeseen large losses, that a portion of the Deposit Premium will be returned to the OSMA.

WORKER'S COMPENSATION TASK FORCE

Special Report
(APPROVED)

Worker's Compensation has been a very controversial area in the law for years. In 1977, after much hard work, Governor Boren's Worker's Compensation Bill was passed. There was an effort to amend the bill but the governor vetoed the amended substitution. The legislature has made several attempts to override the veto but has not been able to gather the support. If left like it is now, the Governor's original bill will go into effect on July 1, 1978, which will mean broader expansion of the law and will include a system of rating impairment.

The Oklahoma Industrial Court has been faced for years with the problem of having to decide a case when the medical information on both sides is so varied. In hopes of finding a solution to this problem, the Court asked that a task force be created of representatives of the

legal and medical professions to study the problems and recommend a set of guidelines to the court that could be made available to all physicians and attorneys. By following these guidelines of rating impairment, both sides in a case could reach a closer and more equitable conclusion and the court would then be in a better situation to more accurately rate the disability. It was pointed out many times that these would strictly be guidelines for the court to use and could be utilized or not.

The task force was made up of eight attorneys and eight physicians, whom the court asked the Oklahoma Bar Association and Oklahoma State Medical Association to recommend representatives and the court was represented by a judge. The task force met on four separate occasions and over the long haul decided that the American Medical Association's *Guides to the Evaluation of Permanent Impairment* was the best information to begin with. The task force also decided to go through the book chapter by chapter and make any deletions or additions that were necessary. At the conclusion of the review process, it was agreed that the AMA's book was the best tool available and it was recommended that the court accept it as a guide except where existing state statutes take precedence.

The final step is one of making this information known to the attorneys and physicians around the state. If the court accepts the task force's recommendation, a series of seminars are planned to take place around the state to make the book available to interested parties and to actually demonstrate its use.

The task force has worked very hard and the cooperation between the two professions has been exceptional. The committee is subject to recall at any time the court so desires.

Reference Committee II

Report of the
COUNCIL ON PROFESSIONAL AND
PUBLIC RELATIONS

May 3-6, 1978
(APPROVED)

INTRODUCTION:

It is the goal of the Council on Professional and Public Relations to influence public opinion through a two-way communications process and thereby improve the image of the medical profession. It is also this Council's goal

to maintain and improve the relationship of the Oklahoma State Medical Association with other professional organizations and to increase membership participation and improve the association's rapport with its membership.

REVIEW OF ACTIVITIES:

During the 1977-78 organizational year the Council on Professional and Public Relations coordinated a number of projects designed to bring about its ultimate goal. The Council oversaw production of *The Journal of the Oklahoma State Medical Association* and all internal newsletters. Additionally, the Council produced a new membership brochure . . . A Proud Heritage . . . which has now been distributed to all members and non-members. The Council also provided public relations / publicity assistance to other OSMA councils and assisted in the promotion of Oklahoma Medical Summit '78.

OSMA-produced public service announcements headed external public relations projects during the 1977-78 year. Three PSAs were released in August, 1977, dealing with the proper use of emergency rooms, the need to keep immunizations up-to-date, and the need to find a physician before an emergency develops. The total cost of production and distribution of these announcements was \$7,500. By March 1, 1978, an estimated total of \$40,000 in complimentary air time had been received.

In early March a fourth public service spot dealing with cardiopulmonary resuscitation was completed and released. This spot serves as an example of this Council's efforts to assist in the activities of other OSMA councils. The spot was produced as a promotional piece for the CPR training program being conducted by the Council on Public and Mental Health. Thus far all television stations responding have indicated they will use the spot. Another major project of this Council continues to be Medical Update office placard and brochures. Thus far approximately 2,000 of these placards have been distributed to physicians' offices, and 200,000 of each of the first three brochures on National Health Insurance, Malpractice Insurance and Physician Advertising have been distributed. Copy for three additional brochures has been approved and will be distributed prior to the annual meeting. The new copy deals with the cost of medical care, the doctor-patient relationship, and CPR.

During the past year the Council on Professional and Public Relations has also attempted to work closely with the press and has continued to sponsor medical spokesmen on television and radio talk shows. The Council worked with KOCO-TV in Oklahoma City on a medical feature story which was voted the outstanding story of 1977 by the Associated Press. The Council has also continued to work with the American Medical Association and to monitor the national public relations program.

OBJECTIVES:

In order to meet the internal objectives of the Council on Professional and Public Relations, the Council has approved a number of ongoing projects. The internal objectives of the Council include strengthening of membership ties and improving the internal communications process. To this end the Council recommends continued publication of *The Journal of the Oklahoma State Medical Association*, the principal communications tool for OSMA, and the periodic publication of OSMA News, a specialized association newsletter. Additionally, the Council intends to update the OSMA slide presentation whenever necessary and to continue to use this as an integral part of the communications program. Additionally, the Council recommends continuation of specialized publications such as Malpractice Update as well as continued cooperation in the promotional efforts for the OSMA annual meeting and other such projects. The OSMA medical directory, a listing of all physicians in the state, should continue to be published at two-year intervals under the supervision of this Council.

To fulfill the goal of influencing public opinion through two-way communications, the Council recommends continued efforts to improve and perfect relations with the various news media. These efforts should include working with members of the media in providing news sources, etc., plus placement of articles or stories concerning medicine. The Council also intends to continue producing public service announcements and further intends to continue the Medical Update project. Additionally, the Council recommends strengthening of the speaker's bureau, continuation of specialized projects such as resource material on National Health Insurance, and cooperation

with local radio and television programs in placing medical personnel in advisory positions.

RECOMMENDATIONS:

The specific recommendations of the Council on Professional and Public Relations for the 1978-79 year plus budgetary considerations are as follows:

- A. Media Recognition Award — \$500
- B. News media relations and associated travel — \$750
- C. The production and distribution of three additional brochures for Medical Update — \$3,000
- D. The production and distribution of two-five additional public service announcements — \$10,000
- E. Purchase of video-cassette recorder/playback unit — \$2,000
- F. Guest writer fees for *The Journal of the Oklahoma State Medical Association* — \$2,000
- G. Production and distribution of informational items on the doctor/patient relationship directed toward physicians — \$1,000.
- H. Consultation fund for special projects and assistance — \$4,000.

The Council on Professional and Public Relations recommends that these activities be funded from general revenue funds and that the public education fund be kept intact as a contingency against further governmental intervention in the private practice of medicine.

Respectfully Submitted,

M. Joe Crosthwait, MD, Chairman

E. N. Lubin, MD, Vice-Chairman

Casey Truett, MD

Eugene S. Bell, MD

Rollie E. Rhodes, Jr., MD

James D. Funnell, MD

Larry L. Long, MD

Marion C. Wagnon, MD

Charles N. Atkins, MD

John R. Bozalis, MD

H. Clark Hyde, Jr., MD

David L. Kyger, MD

Clifford L. Lorentzen, MD

J. Randall Rauh, MD

George R. Smith, Jr., MD

William D. Putnam, MD

Homer D. Hardy, Jr., MD

Jack L. Richardson, MD

Jack W. Parrish, MD

Chester L. Bynum, MD

Linda Mae Johnson, MD

Addendum Report of the
COUNCIL ON PROFESSIONAL
AND PUBLIC RELATIONS
May 3-6, 1978
(APPROVED)

Medical Heritage Committee

During the past organizational year the Medical Heritage Committee continued its efforts to document the medical heritage of the Oklahoma State Medical Association. Additionally it continued to cooperate with other organizations and councils and to provide relevant medical/historical information.

The committee cooperated in the publication of the new OSMA membership brochure . . . A Proud Heritage . . . by providing several historically relevant photographs of pioneer physicians. Additionally the committee's chairman, Dr R. Palmer Howard, reviewed the historical section of the brochure prior to publication and assisted in its documentation.

During the past year the committee has attempted to have a number of historically significant items from the Oklahoma State Medical Association moved to the University of Oklahoma Health Sciences Center campus. A number of years ago when Dick Graham was executive director, the OSMA contributed these items to the Western History Collection of the University of Oklahoma library and to the University of Oklahoma Stovall Museum. Neither institution is able to display all of the items, so the Medical Heritage Committee is attempting to have them moved to Oklahoma City where they can be displayed and used for teaching and research.

A major undertaking for the year is the collection of materials for a Pioneer Doctors Exhibit at Oklahoma Medical Summit '78. The committee cooperated in such a project last year which proved to be quite successful. This year in addition to medical items, the committee is attempting to include items from the University of Oklahoma College of Pharmacy collection. The committee had planned also to contact pharmaceutical companies regarding items but learned that it was too late in the year for this.

The Medical Heritage Committee of the Oklahoma State Medical Association also has had conversations with the Oklahoma Heritage Society and is cooperating in the publication of a book on Oklahoma history.

Respectfully Submitted,
R. Palmer Howard, MD, Chairman

Mark R. Johnson, MD
Robert G. Tompkins, MD
George H. Garrison, MD
Herbert J. Forrest, MD
Robert C. Lawson, MD
M. M. Appleton, MD

Addendum Report of the
COUNCIL ON PROFESSIONAL AND
PUBLIC RELATIONS
(APPROVED)
*JOURNAL OF THE OKLAHOMA STATE
MEDICAL ASSOCIATION*

The Journal of the Oklahoma State Medical Association has been informally placed within the Council on Professional and Public Relations. Its policies and its publication are actually overseen by the Board of Trustees, the Editorial Board and *The Journal* business manager. Publication of a monthly *Journal* is mandated by OSMA bylaws.

During the past year increased emphasis was placed upon the *Journal*, as it is now the primary communications tool for the Oklahoma State Medical Association. The news section was expanded, and more feature-type stories were used in an effort to increase *Journal* readership. *Journal* covers have been tied in directly with articles found in the book . . . again an attempt to increase *Journal* readership. Although no formal readership surveys have been made, it appears that these efforts have been somewhat successful.

One of the primary concerns during the past year has been the financial status of *The Journal of the Oklahoma State Medical Association*. Advertising rates were revised effective January 1, 1978, and more attempts were made to sell local advertising. A new ad rate card has been printed and has been mailed to prime advertisers in the state. Thus far the success of this program has been only minimal. It appears that advertising is staying about level, which in itself may be a successful sign; it has not, however, increased appreciably.

The Journal continues to be one of the OSMA membership benefits which is supported by OSMA dues. During the fiscal year so far (4-1-77 through 3-31-78) income from subscriptions and advertising in *The Journal* equals \$39,206.91. Expenses, excluding salaries which are assessed against the *Journal*, equal \$40,597.90, for a net loss of \$1,390.19. Once salary assessments are made, the net loss for *The Journal* is \$30,677.07. This

is based upon a subscription price of \$10 for non-members and a per issue price of \$1.00. A total of \$11,875 is taken from dues money each year to support *The Journal* and to make it available to OSMA members; this equals approximately \$4.35 per OSMA member.

The Journal of the Oklahoma State Medical Association, the Board of Trustees and the Council on Planning and Development have all expressed their support of *The Journal* and the concept of producing a *quality* publication. We feel that *The Journal* is an important image piece for the Oklahoma State Medical Association, both with our members and with other medical societies and related organizations. We feel that it is in the best interest of the OSMA and the Oklahoma medical community to continue publishing a *Journal* of this quality and to upgrade it whenever possible. We recognize, however, that adjustments will be necessary to stabilize *The Journal's* financial status.

RECOMMENDATIONS:

1. It is necessary that the financial support for *The Journal* be adjusted. In light of cost of printing, paper, etc. today, a total of \$11,875 is not realistic. It is therefore recommended that \$10 per dues-paying member be earmarked for *The Journal*.

2. It is obvious that increased advertising for *The Journal* is both necessary and desirable. It is therefore once again recommended that local (state) advertisers be urged to include *The Journal* in their advertising program. It is further recommended that we once again attempt to retain a part-time advertising salesman on a 25 percent commission.

3. Although it should not be a matter of policy, *The Journal* should have the capability of purchasing articles for publication if it is necessary or desirable. Therefore it is recommended that \$2,000 be budgeted for this purpose.

4. The primary purpose of *The Journal of the Oklahoma State Medical Association* is to advance the science and the art of medicine. For this reason quality scientific papers are imperative. It is recommended that the Editorial Board of *The Journal of the Oklahoma State Medical Association* investigate various methods of encouraging submission of scientific papers. One recommended way to accomplish this would be the establishment of a board

of contributing editors which would be appointed by the Editorial Board. It is recommended that eligibility for the Board of Contributing Editors be limited to physicians who express a desire to serve in this capacity and who submit at least one article to *The Journal* for review. OSMA members who meet these requirements will be eligible for appointment to the Board of Contributing Editors, and their names will be considered by the Editorial Board.

5. The Editorial Board feels that John Montgomery, the man the Council on Governmental Activities has retained in Washington, presents *The Journal* with an excellent opportunity to keep OSMA members up to date on what is happening in Congress. Therefore the Editorial Board recommends and hereby formally requests that formal reports suitable for publication be submitted to *The Journal* and that these reports include not only trends in Congress but also the voting records on significant items of the Oklahoma Delegation.

Addendum Report of the EDITORIAL BOARD

Soon after the writing of the preceding report it was learned that *The Journal of the Oklahoma State Medical Association* had been awarded first place in the annual Sandoz Medical Journalism competition. The Editorial Board is extremely proud of being selected one of the top medical journals in the country and wishes to take this opportunity to thank all those who have contributed to *The Journal's* success. Both the OSMA leadership as well as the general membership have been extremely supportive of *The Journal's* efforts, so we are especially happy to be able to reward this support with a prestigious honor such as the Sandoz Medical Journalism Award.

The Sandoz Award includes both an honorary plaque and a \$500 check. It is the recommendation and desire of the Editorial Board to establish an annual award with these funds to be presented to the medical student who submits the best scientific article for publication in *The Journal of the Oklahoma State Medical Association*. The Editorial Board recommends that the winner in this yearly competition receive a \$100 prize as well as a personalized medallion. The 1977-78 Sandoz Award should provide sufficient funds for the first five years. If at the end of this period no additional prize money has been received, it is recommended

that this annual award be budgeted as a regular expenditure of *The Journal*.

In view of the standard of excellence which has been set by *The Journal* and the financial status, the Editorial Board feels that it is important to point out that *The Journal* carries many notices and news items for the OSMA without remuneration.

After inflation is taken into account, membership subscriptions are changed from \$4.35 per person to \$10, and adjustments in salary accounting are accomplished, it appears that it will be necessary for the OSMA to underwrite *The Journal* approximately \$14,000 next year. It is also obvious, however, that the OSMA would incur nearly all of these costs if it were necessary for them to produce and disseminate the same articles and notices which *The Journal* carries without charge.

Respectfully Submitted,

Mark R. Johnson, MD, Editor-in-Chief

Harris D. Riley, Jr., MD, Editor

Robert G. Tompkins, MD, Editor

Ernest Lachman, MD, Corresponding Editor

Richard L. Hess, Business Manager

Louise Martin, Editorial Assistant

Report of the
COUNCIL ON PUBLIC AND
MENTAL HEALTH

May 3-6, 1978

(APPROVED)

INTRODUCTION:

It is the goal of the Council on Public and Mental Health to provide the citizens of Oklahoma and OSMA members timely information regarding the medical aspects of public and mental health and to conduct and oversee needed programs in these areas. It is further the goal of this Council to provide the Oklahoma State Medical Association with effective leadership in these areas and to provide effective liaison with the various organizations directly or indirectly involved in these activities.

REVIEW OF ACTIVITIES:

The major project of the Council on Public and Mental Health during the past year has been a program for providing statewide training in cardiopulmonary resuscitation (CPR). The Council formally adopted this as its project at the first Council meeting earlier in the organizational year and has worked to establish co-sponsors and to set up actual courses since that time. The program's major co-sponsor is

the American Heart Association, Oklahoma Affiliate, and all actual training courses are being coordinated through local county medical societies.

Each county medical society has been contacted on at least three occasions regarding the training program. To date 28 county medical societies have agreed to sponsor training courses, 3 have declined, and we have gotten no response from 12 societies.

This program has also been coordinated with the governor's office, and in February Oklahoma Governor David L. Boren proclaimed 1978 as CPR Year in Oklahoma. The governor praised this program stating, "Whereas the Oklahoma State Medical Association, the American Heart Association, Oklahoma Affiliate, have undertaken the commendable project of making CPR training courses available to Oklahomans in their local communities . . ." To assist in this project the cooperation of the Oklahoma Press Association has been solicited and received. Letters have been mailed to all the state's newspapers and the OPA has agreed to assist in publicizing the program. Additionally, a 30-second public service announcement on CPR has been produced and has now been distributed to all of the state's television stations. The American Heart Association, Oklahoma Affiliate, is now working with local county medical societies and local physicians in establishing course dates for this program. The Council anticipates this program will continue throughout 1978 and perhaps into 1979 also.

The Council on Public and Mental Health has also coordinated efforts with the Council on Professional and Public Relations in promoting knowledge of the Heimlich Maneuver or the "back slap abdominal thrust" method. We have been in contact with the Oklahoma Restaurant Association in an attempt to establish a program to place instructional posters on the Heimlich Maneuver in restaurants throughout the state. Thus far the Restaurant Association has indicated they are interested in participating in such a program although the specifics have not yet been determined.

As in past years the Council on Public and Mental Health has worked closely with the Oklahoma State Department of Health. In February a mailer was sent to all Oklahoma physicians with a revised schedule for routine immunizations and a revised schedule for reporting communicable diseases.

In this same mailer we contacted state physicians with regard to their interest in participating in health education at the local level. Earlier in the year the Council had considered sponsoring legislation which would establish health education curriculums within the schools. It was decided, however, that this program would be more effective if it were based upon local initiative. We requested that interested physicians contact us if they were willing to cooperate in locally-sponsored health education programs within the schools. Thus far, several hundred physicians have volunteered.

A previously-approved program of thyroid cancer screening was dropped early in the organizational year due to several factors, including federal activities in this area. The CPR program replaced it as the major thrust for the Council during the past year.

Maternal Mortality Committee

The Maternal Mortality Committee continued to function rather independently during the past year under the direction of Adolph Vammen, MD, chairman. This committee, which was established by statute, met on two occasions during the past year to review the causes of maternal deaths. The Council on Public and Mental Health feels this committee serves an extremely useful purpose and recommends continuing activities in this area. The Council and the committee have discussed various methods of making the findings of the committee available to physicians throughout the state; the Council feels this is important and should be pursued further.

Perinatal Task Force

A new Perinatal Task Force was appointed by OSMA President, Dr C. S. Lewis, Jr., this year to study perinatal care which is delivered in the state of Oklahoma. The work of this Task Force has just begun, and the Council on Public and Mental Health recommends that it be continued. Only in this way will we know where our strengths and weaknesses lie in this area.

OBJECTIVES:

In order to meet the established goals of the Council on Public and Mental Health, the Council has approved and has conducted several ongoing projects. Throughout the rest of the year the Council plans to continue with its

statewide cardiopulmonary resuscitation training program, and in future years plans to establish and sponsor other such programs. The Council also intends to continue working on a voluntary program of health education in public schools and further intends to continue to serve in an advisory role to the Oklahoma State Department of Health.

In order to meet increasing public concerns over environmental quality, the Council will continue to fully support the activities of the Environmental Quality Committee and plans to make activities in this area increasingly important in coming years.

The Council further recommends the continuation of the activities of the Maternal Mortality Committee and the recently-appointed Perinatal Task Force.

RECOMMENDATIONS:

The specific recommendations of the Council on Public and Mental Health for the 1978-79 year plus budgetary considerations are as follows:

- A. CPR training programs — \$1,000
- B. Continued health education efforts — \$500
- C. Committee on Environmental Quality — \$500
- D. Support to Maternal Mortality Committee — \$250
- E. Support to Perinatal Task Force — \$500

Respectfully Submitted,
 Armond H. Start, MD, Chairman
 Chester L. Bynum, MD, Vice-Chairman
 Mark A. Kelley, MD
 Delmar L. Gheen, Jr., MD
 Earl M. Bricker, Jr., MD
 Robert C. Bowers, MD
 George W. Prothro, MD
 Hayden H. Donahue, MD
 Glen L. Berkenbile, MD
 Charles E. Smith, Jr., MD
 Daniel F. Keller, MD
 Adolph N. Vammen, MD
 Mark R. Johnson, MD

Report of the
 PERINATAL TASK FORCE
 (APPROVED)

OBJECTIVES:

The task force on perinatal care was formed to study the feasibility of establishing a regionalized perinatal care program for Oklahoma. The membership roster was completed in February and the committee held its first

meeting on February 26, 1978. At that meeting it was unanimously agreed that Oklahoma's perinatal mortality rate was high; Oklahoma ranks 27th in perinatal mortality in the fifty states. It was unanimously agreed that improvements in perinatal care can and should be made. The best approach to that improvement would be through the concept of a regionalized perinatal care program.

The second meeting was held on April 23rd where a problem outline was drawn up, outlining the problems contributing to high perinatal mortality in Oklahoma.

(1) Education is inadequate in two areas (a) physician recognition of high risk patients, and (b) consumer understanding of improvements in perinatal care.

(2) Availability of perinatal care is inadequate in the following areas:

(a) Transportation of mothers and newborns to regional centers when needed.

(b) Facilities — There are not enough facilities to care for high risk pregnancies in many areas of the state.

(c) Costs of high risk care of mothers and newborns are high and will go higher. Such high costs, unlike other areas of health care, are often inadequately covered.

(d) Personnel — Delivery units, post partum wards and nurseries usually have the poorest staff in most hospitals. There is a shortage of adequately trained nurses in this area.

(e) Continuity of care is inadequate. As there is no system of referral of high risk patients, there is similarly a lack of communication from the referral center back to the community.

CONCLUSION:

There is now no method for evaluating perinatal care in Oklahoma as a whole or in its various regions. The members of the task force then addressed themselves to the next steps in implicating a comprehensive study of perinatal care in Oklahoma and later to develop recommendations for improvement. It was agreed that the task force did not include representation from the Oklahoma Osteopathic Association, whose members care for a substantial number of mothers and babies, the Oklahoma Hospital Association, or the Oklahoma Nurses Association. We felt that such representation was necessary if our plans were to be acceptable to everyone; but since we are part of the OSMA, our task force couldn't include an osteopath, for instance. There is a group — the

Committee on Perinatal Care — that is made up of all interested parties that include most of the members of this task force.

RECOMMENDATIONS:

After long discussion it was unanimously agreed that:

(1) This task force change its name to "The Liaison Committee on Perinatal Care," and its membership be those who served on both the task force and the Committee on Perinatal Care.

(2) The Liaison Committee on Perinatal Care be ongoing for a period of at least five years during which it will make periodic progress reports to the House of Delegates.

(3) The Liaison Committee continue to be provided budget support.

Respectfully submitted,

Warren M. Crosby, MD, Chairman

Sara DePersio, MD

Robert Hillis, MD

William F. Thomas, MD

George Jennings, MD

Jed Goldberg, MD

J. B. Wallace, MD

Robert K. Endres, MD

George Giacoia, MD

Robert Block, MD

Bill Dotter, MD

Hillard Denyer, MD

Arnold Nelson, MD

Kenneth W. Whittington, MD

John B. Nettles, MD

Ollie DeHart, MD

Jerry R. Nida, MD

Robert Yeakley, MD

George W. Prothro, MD

Mary McCaffree, MD

Stephen J. Adelson, MD

Emil F. Stratton, MD

Thomas Thurston, MD

William P. Gideon, MD

B. C. Chatham, MD

William R. Murphy, Jr., MD

Jack D. Fetzer, MD

Gilbert E. Haslam, MD

David W. Turbeville, MD

James E. Mays, MD

Report of the

COUNCIL ON SCIENTIFIC ASSEMBLY

April 8-9, 1978

(APPROVED)

INTRODUCTION:

The Council on Scientific Assembly is

charged with the responsibility of working with medical and allied health organizations to plan and carry out scientific programs for the Association's membership. It is responsible for assisting in the planning and publicity of such meetings, and for the planning and conducting of all related events and functions not otherwise assigned to other association councils, committees, or officers.

REVIEW OF COUNCIL ACTIVITIES:

The formation of the Council was authorized by the House of Delegates last year. As required by the bylaws, each medical specialty society recognized by the AMA was contacted for representation on the Council. Each organization is entitled to one representative for each 100 members or portion thereof. The appointment process was rather lengthy, but by September the 28 member board was appointed. The Council has reviewed its responsibilities and has established objectives.

OBJECTIVES:

The Council's basic objectives are organizing, conducting and supporting quality continuing medical education courses for association members. The Chairman of the Council will work closely with the Chairman of the Council on Medical Education and the Chairman of the Annual Meeting Committee. It is anticipated that the Chairman of the Council will either be the Chairman or Co-Chairman of the Scientific Program Committee for the Annual Meeting. Because of the continuing medical education requirement approved by the House of Delegates, the Council will increase its efforts to assist medical specialty organizations in conducting courses and will make application to LCCME for approval to sponsor and co-sponsor courses.

RECOMMENDATIONS:

1. The council be authorized to accumulate information on CME and disseminate the information through *The Journal* and OSMA News;
2. Encourage specialty society participation in the OSMA Annual Meeting;
3. Coordinate various CME programs so that all OSMA members have access;
4. Apply to the LCCME for approval as a sponsor of CME courses; and

5. Encourage innovative development of CME.

BUDGET: \$2,000

Report of the
COUNCIL ON MEDICAL EDUCATION
May 3-6, 1978
(APPROVED)

INTRODUCTION:

The goal of the Council is to study and make recommendations related to all matters of maintaining or improving the level of medical competency in Oklahoma, including but not limited to maintaining liaison with other health professions or occupations, to conducting continuing medical education courses for Association members, to the accreditation of medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by Association policy. Financial aid to education shall also be among the duties of the Council.

REVIEW OF ACTIVITIES:

In 1976 the House of Delegates adopted a requirement of continuing medical education for membership in the Oklahoma State Medical Association and instructed this Council to develop a CME Program. After considering all of the possibilities, the program which the Council developed and the House of Delegates adopted in 1977 was the attainment of the American Medical Association's "Physician's Recognition Award." The basic criteria for the PRA is 150 hours of educational experience, within certain categories, over a three-year period. As of January 1, 1981, all physicians, who are in active practice, must possess a valid PRA in order to remain a member of the OSMA.

It is also possible for a physician to meet the OSMA requirement by qualifying for another CME program which is recognized by and convertible to the PRA such as the American Academy of Family Physicians, American College of Obstetricians and Gynecologists and other specialty society CME programs.

The Council realizes there may be extenuating circumstances which could make it difficult for some to attain this requirement. Therefore, an appeal mechanism for exemption from the requirement has been placed in the program. Any member may petition the Board of Trustees. The Board will then refer the petition to a special committee within the Council on Medical Education, and this committee will study

each petition and return them to the Board with a recommendation. The Board of Trustees will make the final decision.

In order to make CME offerings as accessible as possible for physicians, a large portion of the Council's time was spent in dealing with the charge of the House of Delegates of last year, to survey the state institutions for possible accreditation of their CME programs. The process has been slower than expected, but it is rather a large task to get three physicians together at once to close their office and travel to another city for a survey. There have also been some problems in arranging the hospitals' time to correspond with the survey team's time or vice versa. The Council has thus far surveyed five institutions. In the beginning we contacted each hospital in the entire state and explained to them our new continuing medical education requirement. We also explained how convenient it would be for their physicians if continuing medical education was available to them in their local hospitals. Only seven institutions have responded so far and two of those did not qualify under our guidelines. Of the five institutions surveyed, three have been given approval to produce continuing medical education programs good for Category I credit toward the Physician's Recognition Award. Those institutions are Hillcrest Medical Center, Tulsa, St. John's Hospital, Tulsa, and St. Anthony's Hospital, Oklahoma City. South Community Hospital and Baptist Medical Center both have been surveyed and their accreditation is pending.

OBJECTIVES:

In order for the Council to meet the goals it has set, a concerted effort is going to have to take place in several areas. The program of surveying institutions will have to be changed to meet the needs of some specially organized groups, such as hospital consortiums and teleconference network systems. There is also going to be a need for physically traveling to many of the non-urban hospitals and encouraging their participation.

As this year progresses a system for maintaining records on all members is going to be necessary to insure that all meet the requirement and this will demand more time from the staff.

Another area that will enhance greater progress in the continuing medical education program for the State Medical Association members will be a closer relationship with the

Oklahoma University Health Sciences Center's Department on Continuing Medical Education for Physicians. Because of their expertise in producing continuing medical education programs and their already established system, it is important that the Oklahoma State Medical Association utilize their program to its fullest and hopefully save duplication of services already available.

An area the Council will not be participating in this year, will be that of sponsoring socioeconomic courses. The Council feels that this is not continuing medical education as such.

RECOMMENDATIONS:

1. That the Council continue to actively survey institutions for accreditation.
2. That the Council work to restructure the survey guidelines to accommodate special groups.
3. That the Council work more closely with the existing program of continuing medical education at the OU Health Sciences Center.
4. That the Council continue to endorse and work in the areas of the Medical School Endowment, the Medical School Admissions Board Procedures and the financial aid to education.
5. Budget — \$3,500.00 (The Council on Medical Education had originally asked for \$2,500.00 but the Council on Planning and Development felt this figure was too low and increased it.)

Respectfully submitted,
Floyd F. Miller, MD, Chairman
William R. Smith, MD
John W. Drake, MD
Ralph L. Buller, MD
Irwin H. Brown, MD
David E. Browning, Jr., MD
John M. Moore, MD
Norman Haug, MD
Howard B. Keith, MD
James D. Loudon, MD
Kenneth W. Whittington, MD
Hal Vorse, MD
William G. Thurman, MD
Wallace Byrd, MD
Solomon Papper, MD
F. Daniel Duffy, MD
James M. Guernsey, MD
Lowell N. Templer, MD
Bernard E. Guenther, MD
George W. Schnetzer, III, MD
Sam C. Jack, MD
Kelly M. West, MD

Amendment to the Report
to the
COUNCIL ON MEDICAL EDUCATION
Page 1, Line 20-21

A PRA will be required on January 1, 1981 for those physicians who are members of OSMA as of January 1, 1978. A valid PRA will be required 36 months after the date of acquiring OSMA membership for those joining after January 1, 1978. Retired, associate or honorary members are exempt from this requirement.

Reference Committee #3
Report of the
PRESIDENT C. S. LEWIS, JR., MD
(APPROVED)

Mr. Speaker, Members of the House of Delegates, Guests:

One year ago, when I was privileged to address the House of Delegates as President-Elect of Oklahoma State Medical Association, I suggested that the theme of my administration and the basic objective of the entire OSMA program should be, simply stated, "Better Patient Care."

How well we have progressed toward this goal during the past twelve months is reflected in the comprehensive reports of the various councils, committees and officers of the Association, which are before you for consideration at this annual session of the OSMA House of Delegates.

These reports are the summation of an enormous amount of work and thought by the many physicians who serve the Oklahoma State Medical Association so faithfully and competently. My initial desire is to express my deepest and most sincere thanks to the chairmen and members of the councils and committees, to the Executive Committee, and to the Board of Trustees. I am grateful for their generous contributions of time and effort, for their counsel and wisdom, for their friendship . . . and most of all, for their foresight and singleness of purpose in assuring that OSMA continues its significant programs to constantly increase the quality and quantity of medical care for all our patients.

The Auxiliary to the Oklahoma State Medical Association — those lovely ladies who share our work and our careers — is a major asset to organized medicine. I congratulate the auxiliary, its leaders and members, for a

splendid program of important and objective activities under the leadership of Mrs. Ellen Kimmerer. I cannot conceive of a better auxiliary than exists in the State of Oklahoma.

Oklahoma State Medical Association is blessed with a dedicated professional staff. We have a valued executive in David Bickham, whose ability and gift for management are matched by a tireless capacity for hard work. The same is equally true of his associates — Richard Hess, Lyle Kelsey, Rick Ernest and the office staff — who with David are a keystone of this organization. I would be amiss if I did not also thank Jack Spears, Executive Director of the Tulsa County Medical Society, and Dee Hampton, Executive Director of the Oklahoma County Medical Society, for their experienced assistance and cooperation in so many ways.

In my comments this afternoon, I want to again address the theme of "Better Patient Care" and reflect upon some of the positive contributions which the Oklahoma State Medical Association, both directly and indirectly, is making toward this goal. These efforts are bound up in four major general areas: Physician Manpower, Professional Liability Insurance, Continuing Medical Education and Health Care Cost Containment.

Physician Manpower. In terms of physician manpower to serve its citizens, Oklahoma is in better shape today than any time in its history. This is largely due to intelligent legislation, and to comprehensive planning by the Physician Manpower Commission, the Oklahoma State Medical Association, our medical schools and hospitals.

Beginning July 1, Oklahoma will for the first time have enough internships and 1st year residency positions to accommodate all of the graduates of its medical schools. No longer must many of our graduates seek clinical training elsewhere out of necessity. As a result, fewer and fewer medical graduates educated at the expense of Oklahoma taxpayers will ultimately be lost to practice in this state. In 1973, only five years ago, there were only 85 first-year positions for 136 graduates; this year, the 210 MD and DO graduates will find 210 first-year positions available in Oklahoma institutions.

Today, there are 4,468 physicians in Oklahoma, of which about 4,200 are in active practice of one type or another. Of this number, about 2,500 are in primary care. These figures

are very close to the right numbers and right kinds of physicians needed to fill the requirements which were projected for the state in 1968 and 1971. The attrition rate — loss of doctors due to death, retirement and moving away — is about 2.5 per cent annually. The minimum growth to keep abreast of Oklahoma's expanding population alone, as estimated by responsible agencies, is 1.3 per cent annually. With consideration for other factors, primarily problems of physician distribution, it has been reliably estimated that we need a five per cent replacement of our active medical profession each year — and this is what is being accomplished at this time through responsible long-range planning.

Certainly, the problems of physician distribution have not been totally solved by any means, and there are many areas of Oklahoma still in need of a doctor or more doctors. Yet, a recent study discloses that only 9,600 Oklahoma citizens live more than 20 minutes or 15 miles from primary care. This is about three-tenths of one per cent of the population of Oklahoma. Much of the doctor distribution problem in rural areas and small towns of the state is being alleviated by community-matching rural scholarship programs and the National Health Service Corps. At present, there are 112 physicians in training who have service obligations in small town or rural areas of Oklahoma over the next several years.

I feel that the University of Oklahoma College of Medicine program in Oklahoma City, Tulsa and Enid along with the coordinated planning of the Oklahoma Physician Manpower Commission, and the endeavors of the Oklahoma State Medical Association have done an excellent job in the space of a very few years. These activities should ultimately bring a permanent solution to remaining problems of physician distribution.

Professional Liability Insurance. The availability of malpractice insurance in Oklahoma has been an important factor in assuring adequate physician manpower. The Oklahoma State Medical Association is to be commended for a superior group program with broad benefits which has the distinction of enjoying the lowest cost in the United States. These savings have been made possible in part by a low utilization rate, which hopefully can be maintained, but in a larger measure by the Association's willingness to assume the responsibilities of risk management in under-

writing. The proposed new Underwriting Control Plan, an essential element in our new program with the Hartford Company, is now before you. It imposes new responsibilities and obligations in discipline, but it is a plan which should be approved. The excellent Peer Review work under the auspices of Dr. Bill Leebron's Council on Medical Services has been an important factor in this area.

In the recent years of the crisis in malpractice insurance Oklahoma physicians have continued to enjoy professional liability protection through the OSMA group program. The Association has been willing to aggressively oppose such undesirable concepts as claims-made, to put its own money into underwriting, to assume risk management, to change carriers, and to continuously educate its members in malpractice prevention and defense. By comparing asking premiums and comparable costs in other states, it is possible for Oklahoma State Medical Association to easily document a dollars-and-cents savings to its members that is far in excess of the total amount expended for membership dues to county, state and AMA combined. This is a fact known by most OSMA members, but one which needs to be periodically restated and communicated to all Oklahoma doctors. We owe a great debt to Dr. Alton Brown and his Council on Members Services, for our fine malpractice programs and for other valuable insurance programs.

Continuing Medical Education. I believe that the mandatory program of Continuing Medical Education for retention of OSMA membership, as adopted by the House of Delegates last year, is one of the two most significant steps taken by Oklahoma State Medical Association in recent years—the other being the OURS program. This requirement has already been instituted by 36 other state medical associations or boards of medical examiners. Numerous specialty organizations require CME, and the American Academy of Family Physicians has long been a pioneer in requiring such credits for continued membership.

Once again, *Better Patient Care* is the end product of continuing medical education. The basic and paramount purpose of CME is to better equip us as physicians to provide the highest quality of modern medical attention to our patients.

OSMA sponsorship is materially increasing the amount and availability of continuing

medical education to *all* Oklahoma physicians — and not to just the few who live near the medical schools or metropolitan hospitals. Should our CME program be terminated, the major loss will be to doctors living outside these areas. The Oklahoma State Medical Association program has and will continue to be a stimulus to *more* and better CME, and the accreditation of hospital CME programs greatly assists this objective. The quality of our annual meeting as a result of CME standards and requirements has already been enhanced, and this is much apparent in the splendid scientific program of Oklahoma Medical Summit '78.

Continuing medical education has come to Oklahoma at a low dollar cost, although I realize this is not true everywhere. CME requirements for maintenance of membership will not burden any member. Of the 20 Category I credit hours required annually, 17 can be obtained here at the Summit meeting alone.

We must also be aware that proposals for continuing medical education as a legal requirement for continued licensure have already been heard in our legislature and in Congress. I feel strongly that Oklahoma State Medical Association must continue to voluntarily assume the obligation of providing a structured, disciplined CME program for its members as an alternative to having it made a requirement for continued licensure by legislative fiat.

The rejection of its compulsory continuing medical education program by the Oklahoma State Medical Association would, in my opinion, be a backward step for Oklahoma Medicine — a retrogressive action contrary to the mainstream of American medical progress and clinical education. Moreover, I feel such an action would not be understood by the public nor the media, and I fear it would do much to undo the effective public relations program which OSMA is now successfully implementing.

The Council on Medical Education, under the leadership of Dr Floyd F. Miller and Dr William Smith and the Council on Scientific Assembly led by Dr Roy Carpenter have done a superb job in developing our CME program, and I respectfully urge the approval of the Council's significant recommendations.

Cost Containment. The enormous resources

for quality health care must not be denied or limited by costs which become prohibitive. In many ways, the OSMA has been aggressively participating in efforts at voluntary and effective cost containment . . . measures which will not reduce either the quality nor the quantity of health care for Oklahoma citizens.

The unique Oklahoma Utilization Review System . . . popularly known as OURS . . . permits Oklahoma physicians and hospitals to police their own activities without heavy government regulations and regimentation. Savings of \$15 million were recorded in the first year for monitored patients only; considering that this is only half of the actual patient load, the total savings may be projected to \$30 million. Considering that Oklahoma represents only one per cent of the population of the United States, adoption of the OURS program throughout all of our 50 states, could produce a potential savings of *three billion dollars*.

Significantly, the OURS program has come into national recognition. It has been accepted as an official PSRO, yet compatible with medicine's basic precept of quality care in a free enterprise system. It has attracted the attention of Congressional leaders, and a detailed report on OURS appeared in the April 18 edition of *The Congressional Record*. Even HEW Secretary, Joseph Califano has praised it before the Senate Health Committee.

These exciting developments have led to the conclusion that the concept of OURS might just be the key factor in preventing national health insurance and/or disastrous CAPs on hospital revenue. I cannot too highly praise the Oklahoma Foundation for Peer Review and its Board of Directors under the dedicated leadership of Dr Hillard E. Denyer. I would also add my thanks to Ed Kelsay, whose effective administration has brought OURS into reality.

The Oklahoma State Medical Association is also participating in a Voluntary Health Care Cost Containment Panel established in cooperation with the Oklahoma State Hospital Association, the Oklahoma Osteopathic Association and state representatives of the health insurance industry. This program implements at the state level a national effort engendered by the American Medical Association and the American Hospital Association. The goal is to voluntarily reduce the rate of increase of health care costs by two percentage points in 1978 and by two points in 1979 which would bring it into line with the increase in the gross

national product. This effort shows every indication of success in Oklahoma.

Our greatest concern is that medical care must not be restricted through the imposition of an absolute limit on the number of dollars that can be expended — such as is proposed by the hospital CAP program. The immediate and inevitable result will be *forced rationing of health care*. On our OSMA London Study Trip last fall to investigate the British health system, the 150 Oklahoma doctors and their wives saw many painful results of forced rationing of health care: For example, British citizens over age 65 are universally not admitted to acute care units, and long waiting periods of up to 18 months or longer for elective surgery such as hernia repair and hip replacement are the norm.

As part of our role in cost containment, and in the interpretation of health care costs to the public, the Oklahoma State Medical Association should and must continue the effective programs initiated by the Council on Professional and Public Relations and the Council on Governmental Activities. They are designed to explain to the public, our State Legislature, and to Congress the compelling reasons for maintaining a free enterprise system of health care in the United States, for avoiding national health insurance and other bankrupting programs of government medicine, and for rejecting such disastrous proposals as the hospital CAP.

All of the recommendations of the Council on Governmental Activities under the direction of Dr Perry Lambird are a *must* for OSMA. I believe we have greatly profited from the services of a part-time Washington representative, Mr John Montgomery, and this resource should be continued. The continuation of a close working relationship with each of our Oklahoma Senators and Congressmen and their professional staffs, particularly at the Washington level, should be a top priority for the Oklahoma State Medical Association. Similarly, we must continue our effective work at the state and local level with the Oklahoma State Legislature.

The multiple activities and concerns of Oklahoma Medicine are being intelligently communicated to the public by a valuable public relations program highlighted by a succession of excellent Public Service Television spot announcements. I commend Dr Joe Crosthwait and his Council on Professional and Public Re-

lations for its progressive strides forward. I feel OSMA is making a minimal investment for valuable returns of enhanced public respect and understanding.

The Council on Public and Mental Health, chaired by Dr Armond Start has continued to promote excellent programs with widespread CPR training being the primary focus this year.

All of these programs have been coordinated and budgeted by the Council on Planning and Development under the very able leadership of Dr Orange Welborn.

In closing, let me comment on one other subject. The Oklahoma State Medical Association will shortly attain membership in excess of 3,000, which will entitle us to a fourth delegate to the American Medical Association. This additional representation in the AMA House of Delegates will go far in interpreting to our fellow practitioners over the country, the unique programs and projects being implemented in Oklahoma . . . such as OURS. At the same time, it will give us an additional resource to absorb what is good from the rest of the nation. While Oklahoma is in a small minority of states requiring mandatory AMA membership, I feel we should continue this policy in the interests of a maximum utilization of our organizational resources.

It has been a great privilege to serve as President of your Oklahoma State Medical Association, and I am honored by the confidence which you placed in me. I have had a great time and would do it again. I doubt if any OSMA President has had as much pleasure as I have. However, I agree that a one-year term is the appropriate length. We have a splendid medical profession in Oklahoma, a fine Oklahoma State Medical Association. I can only foresee a continuation of our progressive efforts to better serve our patients in the years to come. Once again, my thanks for your work, your cooperation, your guidance, and your friendship . . . and my very best good wishes to Dr Marvin Margo for the year ahead.

Report of the
PRESIDENT-ELECT
May 3, 1978
(APPROVED)

Mr. Speaker, Dr Sammons, Dr Lewis, members of the House of Delegates, fellow physicians, and friends:

First of all I want to thank each and

everyone of you for the confidence you have shown in me and the opportunity to address you here today. I look forward to serving as President of the Oklahoma State Medical Association as I look forward to the many challenges I no doubt will encounter. I hope that when I stand before you next year in Tulsa we will be able to look back on the previous 12 months as a productive year for me as well as the association. I am sure that with your continued help and assistance that we will be able to do so.

No one knows better than I do the many sacrifices the President of our Association must be prepared to make. I am fortunate to follow a man of the caliber of Dr Lewis who has served our association exceedingly well. Dr Lewis has often sacrificed his own personal life for the affairs of our association, and he has given willingly of both his time and expertise. He has been available at any time and has traveled extensively to promote our association and our profession. I ask you to stand with me now to express our appreciation to Burr for all that he has done for us.

I have been asked why I agreed to take this position and what I hope to accomplish during the next year. I honestly must say that I am unsure. I do know that I feel an obligation to our profession and to our association and I hope to be able to extend that same feeling to our colleagues. I guess if I could accomplish only one goal during the next 12 months, it would be to involve more physicians on a personal basis in the Oklahoma State Medical Association. I realize that this is something that has been said time and time again, but I earnestly believe it is essential to the future of our profession. Organized medicine cannot afford the luxury of bureaucracy, nor would I advocate the creation of one. If physicians truly want to control their own destinies, they must be prepared to be partners in the creation of those destinies. Once we allow people other than physicians to make our decisions for us, the battle is lost. Therefore, I believe it is absolutely essential that we instill in our membership a sense of loyalty, a sense of dedication, and a willingness to participate. Without it, we are no match for the agencies, boards, councils and commissions which would be more than willing to shape our future for us.

I urge each of you to remain active in the

medical federation in the coming year and to make your voice heard. I urge you to remain particularly active in the state medical association, and to help me in determining our policies and in carrying out our activities. I solicit your help, I solicit your recommendations, and most of all I hope that you will let us know how we are doing. We Oklahomans have gotten used to fumbles. But if we drop the ball next year, I hope that you will let us know immediately, and not wait until the next annual meeting.

I am sure Dr Sammons shares my desire to involve more of you in the medical federation, and I am sure he would also welcome your comments. I know Dr Sammons has heard from Oklahoma doctors from time to time, and I am sure this has led to some improvements in the AMA's operations and to some programs which otherwise might never have come about.

In the past year I have learned what an excellent medical association we have in Oklahoma, and I believe this is a direct result of active physician-participation. Our *Journal* has just received an award for being the nation's finest; the Oklahoma Utilization Review System is being promoted nationwide and was recently praised by HEW Secretary Joseph Califano; our Public Relations Council has produced some extremely effective public service announcements which have now been syndicated to other state medical societies; to my knowledge we are the only state society with a personal lobbyist in Washington and we are the only society so actively engaged in federal legislation; because of our efforts the Oklahoma Health Systems Agency has the maximum number of health care providers allowed by law; Oklahoma doctors have the finest professional liability insurance program in the nation and have had for years; as a result of our efforts CPR training courses are being offered throughout the state and the Governor has declared 1978 CPR Year in Oklahoma . . . the list goes on and on. The point is the Oklahoma State Medical Association is an effective representative for doctors in Oklahoma, and activities such as these can only be carried on with the active support and participation of our members.

During the coming 12 months, I am going to call upon many of you to help me in these activities, and I hope that you will accept the challenge. Already the Workers Compensation Task Force which I was appointed to earlier in

the year and co-chaired has eased the way for implementation of Oklahoma's new law. During coming months we plan to conduct seminars with both doctors and attorneys to familiarize them with the new law and to make them aware of the new guidelines the Industrial Court will use.

But workers compensation is only one of many areas which we as doctors must be involved in. I realize, as you do, that there are too many committees which must be attended, too many reports which must be read, too many forms which must be completed, too many questions which must be answered, and too many problems which must be solved. Still, I call on each of you to do more.

I pledge to you my time and my energy during the coming year, and I call upon you to devote the same. Together we can make the Oklahoma State Medical Association an even more effective voice for Oklahoma doctors, and our Association will continue to be recognized as a leader of the medical federation.

I thank you for this honor and for this opportunity.

Report of the
BOARD OF TRUSTEES
May 3-6, 1978
(APPROVED)

INTRODUCTION:

The Board of Trustees, through searing heat and icy snow, has met the appointed schedule of quarterly Saturday meetings with laudable attendance and serious commitment to duty. The actions taken at the August 27 and November 19, 1977, and the February 11, 1978, meetings will be summarized in this report, the final meeting of May 3, 1978, being summarized in the Supplemental Report to the House of Delegates.

With rare exception, each Trustee position has been filled at each meeting. Key decisions of the Executive Committee, ratified by the Board, are incorporated in this and the Supplemental Report.

ACHIEVEMENTS OF THE COUNCILS:

The seven Councils of the Association, headed by well-qualified, diligent and dedicated Chairmen and aided in no small measure by active Committees, have developed their various charges effectively. Board of Trustees guidance and affirmation of their actions will be summarized briefly.

The Council on Governmental Activities urged that the Association join in the lawsuit against the FDA regarding the patient package insert for estrogenic substances, which was accomplished though the suit was later dismissed in the Courts. The Board has been kept apprised of key actions of OSMA's Washington representative. In November, a statement in opposition to the September 23rd National Health Planning Guidelines was adopted by unanimous vote, conveyed to the Secretary of HEW by telegram and a copy was sent to each Oklahoma congressman. In February, the Council developed a position detailing continued opposition to the amended Health Planning Guidelines, framed in a strong letter to the Secretary and copies to the Oklahoma delegation. The Council has effectively spoken in behalf of the Association in state and federal legislative matters.

The Council on Professional and Public Relations continued to provide effective internal and external communications to and for the Association; the most notable, internally, being the new membership brochure, "A Proud Heritage," distributed to all Oklahoma physicians, and externally being preparation, distribution and syndication of public service television announcements extolling the virtues of American medical care. Additionally, it was recently learned that *The Journal* of the Oklahoma State Medical Association was awarded first place in the Sandoz Medical Journal Contest . . . an honor for *The Journal* and the association.

The Council on Members Services received guidance, in August, concerning negotiations with two potential carriers of professional liability insurance under the OSMA plan; consideration was also given to formation of a "captive insurance company" to provide malpractice coverage in the event of unacceptable results of negotiations. The Board reaffirmed the concept and the amount of the underwriting surcharge for non-OSMA members participating under OSMA's PL plan in August and also adopted a Council recommendation, purchasing officers and directors liability insurance. In November the Board was pleased to ratify a good contract for professional liability insurance, negotiated by the Council and Hartford Insurance Company. In February, the Board received a status report concerning participation in the OSMA professional liability plan and approved, in principle, the Underwriting

Control Plan negotiated by the Council and Hartford. The Physician's Care Committee presented a report to the Board, in November, regarding the procedure being used to aid OSMA physicians referred to the Committee for help.

The Council on Medical Services has monitored the Health Systems Agency in Oklahoma, recommending to the Board that Association physicians be active on the Boards of both the HSA and the Sub-Area Councils. In November, the Board submitted nominations to fill a vacancy, by resignation, of the SAC for District VI. The Council has discussed the situation regarding the proposed City of Faith Hospital in Tulsa (as has the Executive Committee and the Board), the Council anticipating many more hours spent on this controversial topic. The Board has expressed, to the Oklahoma Health Planning Commission, the importance of Tulsa County Medical Society's poll regarding The City of Faith application and the hope that the Commission will consider the project objectively, on the basis of factual information. In November, the Board heard a presentation concerning Workers' Compensation and the Oklahoma Industrial Court by Judge Chris Sturm as a result of which a Task Force has been appointed to develop acceptable guidelines for the Court and disseminate same to the OSMA membership, under the guidance of the Council on Medical Services.

The Council on Medical Education has kept the Board apprised in its progress to survey and recommend accreditation to conduct Category I CME courses of various institutions in an effort to provide convenient access to CME courses for Oklahoma physicians. Five institutions have been surveyed, three were approved and two are pending approval. The Council has worked toward a closer relationship with the Oklahoma University Health Sciences Center Department of Continuing Education for Physicians and has developed a proposal for endowment of a professorial chair in Continuing Medical Education, funded by voluntary contributions of OSMA members. The endowment plan has been endorsed by the Board and is to be presented to this House of Delegates.

The Council on Public and Mental Health received Board endorsement of a project con-

cerning cardiopulmonary resuscitation, now being implemented through component county societies and with the cooperation of the American Heart Association. This program also received the endorsement of Oklahoma Governor David Boren who proclaimed 1978 CPR Year in Oklahoma.*

The Council on Scientific Assembly, the newest Council to be activated, has been appointed and organized through the current organizational year.

As coordinator of the above named Council activities, the Council on Planning and Development presented a report of prior activities to the Board in November, which was approved. An expenditure of about \$160,000 for expansion of OSMA headquarters, to be leased to the Oklahoma Foundation for Peer Review pending OFPR acceptance as conditional PSRO, was approved despite a minority contention that such action was beyond the scope of the Board.

LIAISON WITH THE AMERICAN MEDICAL ASSOCIATION.

At the August Board meeting, the Trustees received reports from the AMA Delegates and Alternate Delegates concerning the Annual Meeting of AMA in June. Doctor Scott Hendren, on request, presented an outline of H.R. 1818 and S. 218, legislation sponsored in the Congress by AMA; the Board discussed these bills and voted to withhold OSMA support.

At the November meeting, two resolutions to the AMA pertaining to a national public relations program were endorsed as well as a resolution, initiated by the Executive Committee, extolling the superior virtues of the OURS program and encouraging the Department of HEW to closely review retrospective auditing as a possible prototype for utilization review throughout the nation.

The AMA Delegates briefly reviewed the December AMA Convention at the February Board meeting.

OKLAHOMA FOUNDATION FOR PEER REVIEW:

Mr. Ed Kelsay, Executive Director of OFPR, in November reported the experience of the Foundation in its first six months of OURS operation, stating that operational costs had been considerably less than any other plan currently used by PSROs. The Foundation's application to be the conditional PSRO based on the

*The Council has also worked on establishing a voluntary system of Health Education in Oklahoma schools.

OURS Plan was, at that time, before DHEW in Washington for final approval, considered almost a certainty. The Board accepted OFPR's report and adopted the resolution to the AMA previously described. Conditional PSRO approval had not been obtained by the February Trustee's meeting.

EXECUTIVE COMMITTEE:

Many Board actions described in this report were initiated in Executive Committee meetings. The following items were among the decisions made by the Executive Committee during the organizational year.

The committee reported to the Board, in August, that the new Council on Scientific Assembly had been appointed, the protocol of the Grievance Committee reorganized and salary increases for Association personnel had been increased by about 9%. In November, progress on Summit '78 and plans for the OSMA Annual Meeting in 1979 were announced. A new secretarial position and a position for a reporter-writer, possibly part-time, were approved. By the February meeting, the secretarial position had been filled and the search continued for the reporter-writer.

Through careful monitoring of Association finances and budget considerations, the Executive Committee, in February, recommended consideration of a \$30 OSMA dues increase, to begin in 1979. The Board referred the matter to the Council on Planning and Development for consideration in conjunction with its development of plans for the '78-'79 organizational year.

POSITIONS ADOPTED:

In the November meeting, the Board of Trustees adopted . . . a position on National Health Insurance based on a paper prepared by OSMA staff and presented by the Executive Director, Mr David Bickham,

. . . a position in opposition to the combined stand of AMA and the American Bar Association favoring decriminalization of marijuana to be relayed to the media.

NOMINATIONS AND APPOINTMENTS:

The Board of Trustees submitted the names of three physicians to the Board of Medical Examiners for appointment of one, received and approved nominees to the Board of OMPAC during the August meeting. Trustees accepted a list of nominees for the OU College of Medicine Admissions Board from the Council

on Medical Education and referred the list back to the Council for final action.

AWARDS AND EXPRESSIONS OF SUPPORT:

In November, as mandated by the 1977 House of Delegates in Resolution 10, the Board of Trustees presented an award of appreciation to Doctor Rex E. Kenyon for his many years of dedicated service to the Oklahoma State Medical Association and his excellent contribution to the medical profession through his Chairmanship of AMPAC.

The Board of Trustees, in February, selected Doctor Hillard Denyer, Bartlesville, for the A. H. Robins Award and Mr. W. K. Warren, Tulsa, to receive the Association's Annual Public Service award, for outstanding achievements in support of better medical care in Oklahoma.

At its February meeting, the Board endorsed the candidacy of Jack B. Nettles, MD, Tulsa, for the AMA Council on Medical Education and sponsored the candidacy of Ed L. Calhoon, MD, Beaver, for the AMA Council on Legislation.

In August, the Board reaffirmed its support for the Oklahoma Cancer Center and its Constitution & By-Laws.

American Medical Student Association representatives reported to the Trustees in February, receiving support from the Board and a grant of \$1,000 to assist in expenses of sending Oklahoma AMSA delegates to the March national convention.

DUES AND DONATIONS:

Sustaining membership dues to AMSA in the amount of \$50 was approved in August, \$85 for dues to the Better Business Bureau of Central Oklahoma in November and \$30 dues to the Oklahoma Public Expenditures Council in February.

The Board authorized a contribution of \$250 to the essay contest of the Governor's Committee on Employment of the Handicapped, "Ability Counts," the winning essay to be published in *The Journal*.

LIFE MEMBERSHIP:

Life memberships were authorized for:

Alfred E. Evans, MD, Perry
L. O. Hill, MD, Vinita
Laurence E. Joers, MD, Jay
B. W. Shelton, MD, Miami
Charles W. Letcher, MD, Miami
Lyman C. Veazey, MD, Ardmore

John H. Veazey, MD, Ardmore
Malcolm Horne, MD, Ardmore
Roger J. Reid, MD, Ardmore
C. D. Cunningham, MD, Ardmore
Vincel Sundgren, MD, Tulsa
William N. Weaver, MD, Muskogee
Elton W. LeHew, MD, Ft. Lauderdale,
Florida
Hervey A. Foerester, MD, Oklahoma City
John R. Cottrell, MD, Henryetta
Charles S. Maben, MD, Okmulgee
George L. Tracewell, MD, Okmulgee
E. O. Johnson, MD, Tulsa
Earl M. Lusk, MD, Tulsa
Ella Mary George, MD, Oklahoma City
C. H. Cooke, MD, Perry

DUES-EXEMPT MEMBERSHIPS:

The Board of Trustees granted dues exemptions to:

James K. Boyd, MD, Tulsa
Mildred L. McMurtry, MD, Durant
William Garnier, MD, Stillwater

AFFILIATE MEMBERSHIP:

The Board of Trustees accepted the application for affiliate membership for Eleanor Irvine, MD, petitioned by Comanche-Cotton-Tillman County Medical Society, with the stipulation that full OSMA dues be paid.

MISCELLANEOUS:

The Board urged attendance of AMA Delegates, Alternate Delegates and/or General Officers at a special AMA meeting March 23, 1978, in Dallas, pertaining to cost containment, national health insurance and related topics.

Legal Counsel was recommended concerning Blue Shield retrospective deductions for physicians over-payment.

Doctors Armond Start, C. S. Lewis, Jr., and Marvin K. Margo were appointed as members of the ad hoc Committee on Appropriations and Auditing.

Supplemental Report of the BOARD OF TRUSTEES (APPROVED)

The annual meeting of the Board of Trustees convened the morning of May 3, 1978. The following major actions were taken.

I. J. B. Eskridge, III, MD, Oklahoma City, was elected Chairman and Elvin Amen, MD, Bart-

lesville, was elected Vice-Chairman of the Board.

II. The board received a report of the Executive Committee in which the following actions and recommendations were received and approved.

Continued close liaison between the OSMA and the Oklahoma Foundation for Peer Review is strongly urged, a position which will be developed and submitted to the Boards of each organization. The Board recommended certain nominations to the Board of OFPR and gave approval to a proposed OMPAC Board, tabling final acceptance to the August meeting.

Richard Hess was recommended to be Associate Executive Director, and salary adjustments of staff, within budget restrictions, were awarded.

III. Reports and Resolutions to the House of Delegates

The Board of Trustees reviewed reports and resolutions to the House of Delegates and wishes to offer the following recommendations to the House.

Resolutions 14 and 15, submitted by the Council for Planning and Development, were approved and referred to the House of Delegates.

The board accepted the Report of the Council on Planning and Development, the Annual Program of Activities, and included the budget considerations.

The board accepted a report of the Committee on Appropriations and Auditing, recommending a dues increase of \$30 per year to the House of Delegates, beginning January 1, 1979.

IV. Appointments and Awards

The Board of Trustees reappointed Robert G. Tompkins, MD, Tulsa, to another three-year term on the Editorial Board. Dr Mark R. Johnson, Editor-in-Chief, Richard Hess, Business Manager, and Louise Martin, Editorial Assistant, received the board's commendation for the recent award from Sandoz.

The board confirmed and commended to the House of Delegates Mr. W. K. Warren, Tulsa, to receive the Distinguished Service Award for Outstanding Layman and Hillard Denyer, MD, Bartlesville, to receive the A. H. Robins Award.

The board acted on a request from the Pottawatomie County Medical Society regarding a special award to Clinton Gallaher, MD, Shawnee, for a special award for outstanding service to his profession and community, commending

the Award for Meritorious Achievement to Dr Gallaher.

Special respect was accorded James H. Sammons, MD, Executive Vice-President of the AMA.

V. Resolutions to the AMA

Trustees commended the following named resolutions for submission to the House of Delegates of the American Medical Association in June: Resolutions 4, 9, 12, 14 and 15.

VI. Items of Information

The board received the Report of the Oklahoma Foundation for Peer Review, primarily relating to the approval of the OURS plan as conditional PSRO.

A report on the functioning of the Underwriting Control Plan of the Association's professional liability program was presented by David Bickham, who serves as Risk Manager of the Underwriting Committee.

The board, sitting as Judicial Council considered an appeal of C. N. Talley, MD, Marlow, to a decision of the Underwriting Committee of the Professional Liability Program of OSMA, ruling to deny Dr Talley's appeal.

A protocol of petitioning for exemptions to the association's Continuing Medical Education requirement was received through the Council for Medical Education.

VII. Life, Affiliate and Dues-exempt memberships.

The following physicians were approved by the Board for Life Membership:

Roy W. Donaghe, MD, Norman
Herbert Howard, MD, Lawton
Paul B. Lingenfelter, MD, Clinton
Francis R. First, MD, Checotah
Donovan Mosher, MD, Seminole
Henry W. Harris, MD, Oklahoma City
Fannie Lou Leney, MD, Oklahoma City
James R. Ricks, MD, Oklahoma City
Gerald Bednar, MD, Oklahoma City
Paul M. Vickers, MD, Oklahoma City
James B. Thompson, MD, Tulsa

An application for affiliate membership in behalf of Robert Foster Moore, MD, Caney, Kansas, received from the Washington-Nowata Medical Society was approved with the stipulation that full OSMA dues be paid.

Dues-exemption status was granted by the board to the following physicians:

John X. Blender, MD, Cherokee
Vaman Diwan, MD, Boise City
N. C. Gaddis, MD, Tulsa
James K. Boyd, MD, Tulsa

Jeanne Rainer, MD, Oklahoma City

W. W. Sanger, MD, Oklahoma City

Richard L. Harris, MD, Oklahoma City

Corresponding membership was awarded to Richard Harrison, MD, Muskogee, with stipulation of partial dues.

VIII. Expression of Appreciation

The Board of Trustees expressed appreciation to those Trustees retiring from the Board by virtue of having completed two terms or by voluntary resignation after completion of one term.

Frank W. Clark, MD, Ardmore

Paul N. Vann, MD, Lawton

B. R. McCann, MD, Durant — resigned after one term.

Special commendation was given to Frank Clark, MD, Ardmore, who has just completed two years service as Vice-Chairman of the Board.

The Board of Trustees recommended location of a Resident Physician Member to represent the resident members at the American Medical Association - Resident Physicians Section, in an attempt to stimulate greater participation in the Resident Physicians Section of AMA.

XI. Recommendations

The Board of Trustees requests and recommends approval to the House of Delegates the Report of the Board of Trustees and the Supplemental Report.

The Board of Trustees commends to the House of Delegates the Annual Program of Activities (presented by the Council on Planning and Development through the Board) requesting approval and support of the Program.

J. B. Eskridge, III, MD

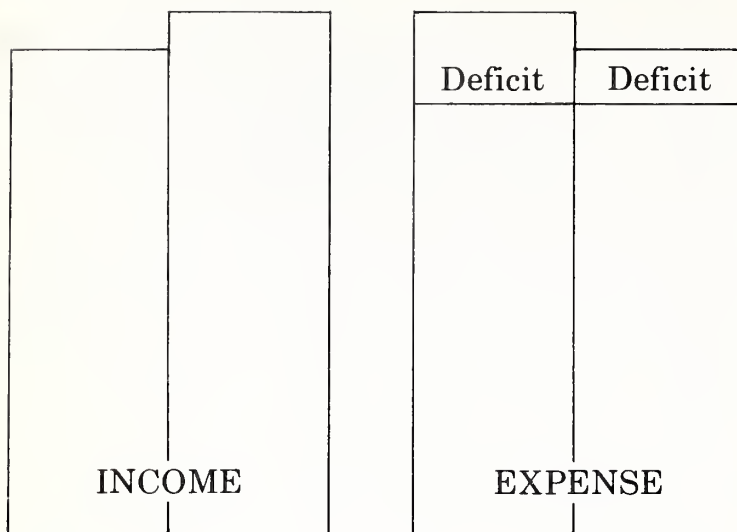
Chairman

Board of Trustees

Report of the
SECRETARY-TREASURER
May 3-6, 1978
(APPROVED)

INTRODUCTION:

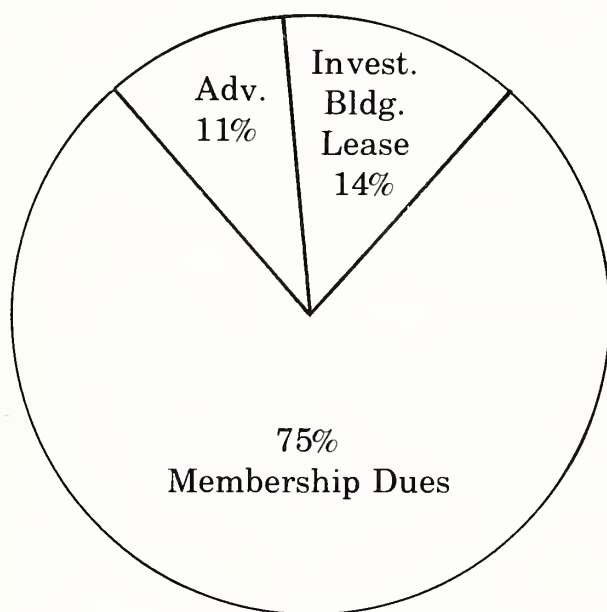
Last year the House of Delegates approved a program of activity that anticipated a deficit of approximately \$25,000. At the close of the fiscal year, March 31, 1978, the Association had overspent income by \$5,500. However, there are unpaid dues attributable to the 1977-78 fiscal year which could offset some of the loss. The following charts reflect income and expenses as compared to the projected budget.



Projected Actual Projected Actual
\$391,000 \$398,500 \$416,000 \$404,000

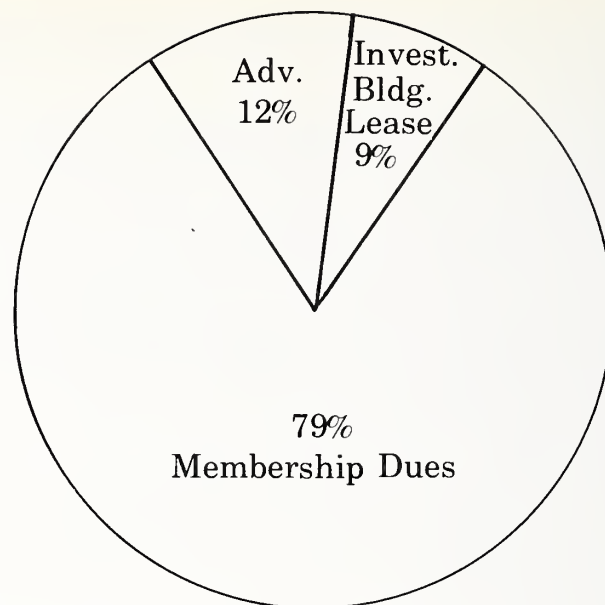
INCOME

The 1978-79 Budget anticipates income of \$467,000. Income sources are:

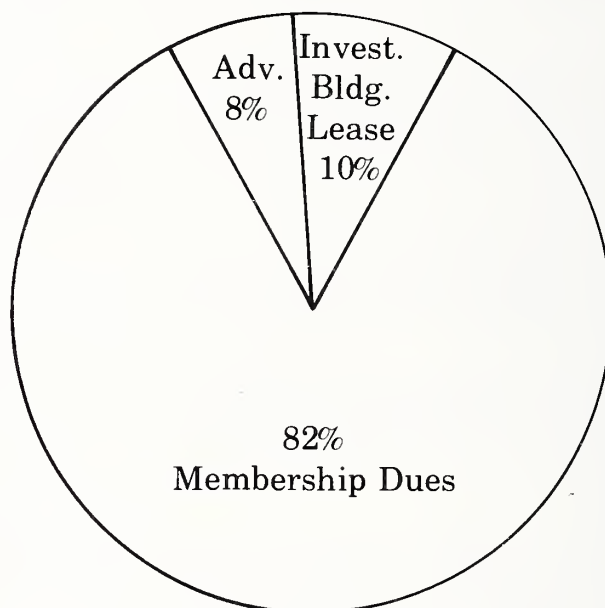


2,480 full dues paying members @ \$150	\$372,000
240 Junior members @ \$10	2,400
	\$374,400
less <i>Journal</i> Subscriptions	23,650
Total	\$350,650

The source of the Association income is principally membership dues which comprises 79% of the total, 21% comes from commissions, investments, interest and advertising.

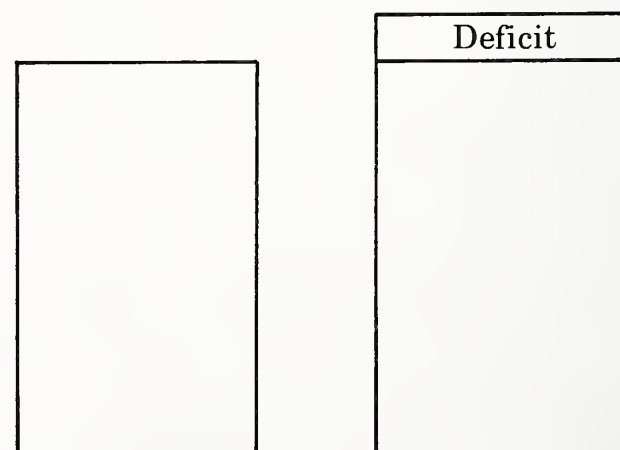


1977-78
\$388,281



1976-77
\$324,053

The increase in rents is due to a new rental agreement with the Oklahoma Foundation for Peer Review which is currently housed in the headquarters building. OFPR pays \$1,500 per month.



Projected Income \$467,000
Projected Expenses \$471,850

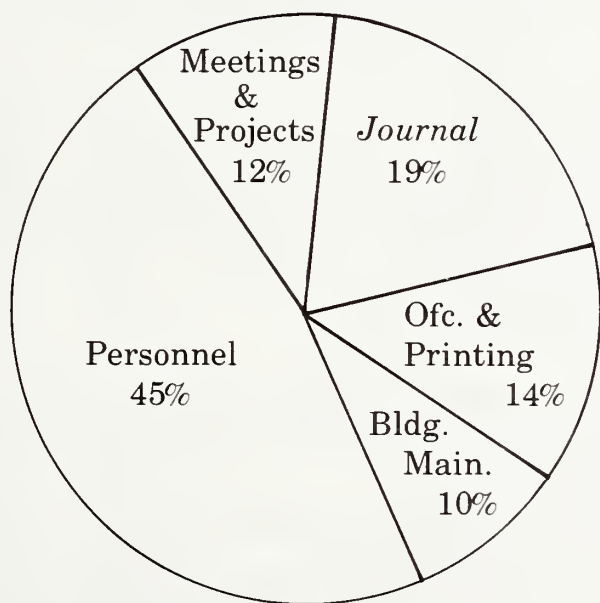
The Board of Trustees has authorized the construction of a new building for OFPR however, construction costs and cost of financing have not been finalized. In addition to the increased rents the budget anticipates \$12,000 from the sale of the OSMA directory, which is published every two years. However, expenses to publish the book will be \$15,000 causing a loss next year. There will be sufficient copies to sell in fiscal 1979-80 to produce an overall profit for the two years of \$4,000 to \$5,000.

Other sources of income are our underwriting and administrative services contract with Hartford and the sale of computerized data to agencies and others who have a need for information about physicians.

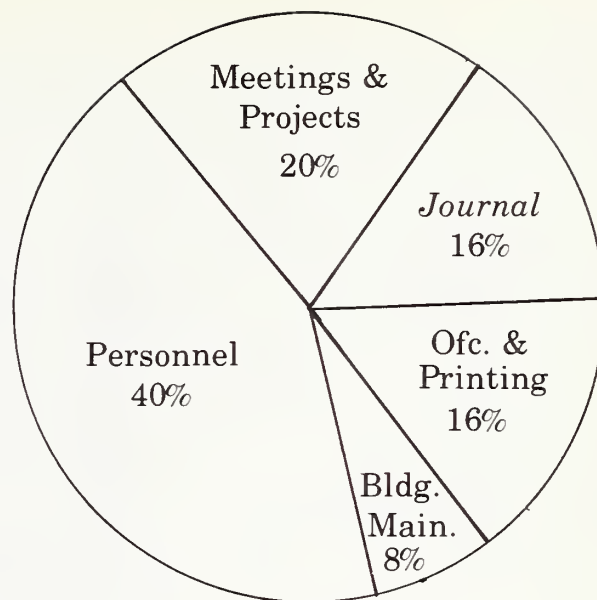
Projections for 1978-79 indicate there will be a deficit of \$4,850 without a change in dues or alterations in the Annual Program of Activities.

EXPENSES

Expenses have been adjusted on a variable basis to allow for inflation and increased operations. The largest increase is in Council and Committee Activities which anticipates House of Delegates approval of the annual Work Program. Most of the recommended activities are a continuation of current programs, some of which are financed from special funds last year.



1977-78
Actual
\$404,000



1978-79
Proposed
\$471,850

Expense allocation would change slightly in 1978-79, but principally because of accounting technique.

A copy of the proposed budget detailing income and expenses is attached (Exhibit #1).

FINANCIAL CONDITION:

The audit report (attached) reviews the financial operations of the association. Assets increased over last year by \$32,000, dues payable for this year have, and are being collected properly. The association funds are invested at negotiated rates and the surplus is approximately \$75,000 to \$100,000 which represents about 2 months operating capital.

RECOMMENDATIONS:

The Association's operations are quite complex and the ability to predict in advance expenditures with absolute certainty is impossible. For the past two years expenses have equaled or exceeded income and reserves are not as high as good management practices would dictate. I would recommend that to build reserves and provide for expanded activities and permit flexibility in the budget that the dues increase suggested by the Council on Planning and Development be approved.

Respectfully submitted,
Armond H. Start, MD
Secretary-Treasurer

EXHIBIT 1

OKLAHOMA STATE MEDICAL ASSOCIATION

	1978-79	1977-78
INCOME	<i>Budget</i>	<i>Actual</i>
Dues	350,650	309,724
Journal Subscriptions (from dues)	23,750	11,875
Journal Sales	1,000	700
Journal Advertising	28,400	26,632
Interest and Commissions	11,000	10,487
Rent	22,200	10,805
Directory Sales & Advertising	12,000	3,627
Annual Meeting	1,500	4,025
Other	1,000	504
Underwriting Contracts	10,000	0
Physician Data Service	3,000	0
Specialty Society Services	2,500	0
Transfer to Medical Ed. Council	0	5,000
Total Income	\$467,000	\$383,379
EXPENSES		
Administrative Expenses (Schedule I)	283,400	254,024
Journal (Schedule I)	76,350	69,884
Out-State-Travel	20,000	21,147
In-State-Travel	6,800	7,016
Directory	15,000	2,767
Council and Committee Activities (Schedule I)	61,800	28,280
Dues & Subscriptions	4,000	3,868
Depreciation	4,500	4,800
Total Expenses	\$471,850	\$391,786
Excess of Income over Expenses	(\$4,850)	(\$8,407)
ADMINISTRATIVE EXPENSES	SCHEDULE I	
Salaries	\$151,350	136,850
Payroll Taxes	10,050	9,113
Retirement Plan Premiums	15,000	14,740
Health Insurance	11,000	9,748
Staff & Officers Expense	8,300	7,662
Disability Income Insurance	1,100	739
Auto Rental & Repair	2,400	2,356
Equipment Rental	7,200	5,879
Office Supplies	14,250	12,500
Equipment Repairs & Maintenance	1,550	1,355
Postage	11,000	12,634
Telephone	9,000	9,559
General Insurance	3,300	2,790
Utilities	7,500	6,282
Building Repairs & Maintenance	4,000	3,850
Accounting	4,000	7,182
Legal	2,400	1,650
Awards & Contributions	2,400	2,165
Newsletter	2,400	2,291
Other Operating Expenses	5,200	4,589
Underwriting Contract Expense	10,000	90
Total	\$283,400	\$254,024
COUNCILS AND COMMITTEES		
Council on Governmental Activities	20,300	13,365
Council on Medical Services	4,000	442
Council on Medical Education	2,500	467
Council on Scientific Assembly	2,000	0
Council on Members Services	3,000	439
Council on Professional & Public Relations	23,250	10,562
Council on Public & Mental Health	2,750	536
Council on Planning & Development	4,000	2,469
Total	\$61,800	\$28,280
JOURNAL		
Salaries	32,500	29,286
Printing	29,000	26,293
Advertising	11,500	11,182
Art Work	1,600	1,536
Proofreading	700	635
Other Operating Expenses	1,050	952
Total	\$ 76,350	\$ 69,884

House of Delegates

Oklahoma State Medical Association

Oklahoma City, Oklahoma

We have examined the balance sheet of the Oklahoma State Medical Association as of March 31, 1978 and 1977 and the related statements of revenue and expenses, changes in fund balances and changes in financial position for the year ended March 31, 1978 and the ten months ended March 31, 1977. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The Oklahoma State Medical Association does not provide for depreciation on buildings, as is required by generally accepted accounting principles.

In our opinion, except as noted in the preceding paragraph, the financial statements referred to above present fairly the financial position of the Oklahoma State Medical Association as of March 31, 1978 and 1977 and the results of its operations for the year ended March 31, 1978 and the ten months ended March 31, 1977 in accordance with generally accepted accounting principles applied on a consistent basis.

Moak, Hunsaker & Rouse

Oklahoma City, Oklahoma

April 13, 1978

OKLAHOMA STATE MEDICAL ASSOCIATION
BALANCE SHEET
MARCH 31, 1978 AND 1977

Assets	1978	1977
CURRENT ASSETS		
Cash	\$ 14,100	58,691
Savings accounts	414,661	341,742
Accounts receivable	14,743	11,745
Interest receivable	1,250	1,142
Prepaid expenses	2,744	1,572
Total Current Assets	447,498	414,892
PROPERTY AND EQUIPMENT - Note 1		
Land	7,808	7,808
Building	213,592	213,592
Paving	2,451	2,451
Furniture, fixtures and equipment	62,840	57,732
	286,691	281,583
Less: Accumulated depreciation	36,957	31,278
	249,734	250,305
TOTAL	\$697,232	665,197

The accompanying letter and notes are an integral part of this statement.

Certain 1977 amounts have been reclassified to conform to 1978 presentation.

EXHIBIT A

LIABILITIES AND FUND BALANCE 1978		1977
CURRENT LIABILITIES		
Accounts payable	\$ 42,652	51,348
Accrued payroll taxes	1,462	2,288
Loan and scholarship payable	36,577	19,721
Total Current Liabilities	80,691	73,357
DEFERRED INCOME —		
Notes 1 and 2	261,987	221,108
CONTINGENT liabilities — Note 7		
FUND BALANCE — Exhibit C		
Appropriated for public education	32,120	42,750
Appropriated for building maintenance	7,876	7,876
Unappropriated	314,558	320,106
	354,554	370,732
TOTAL	\$697,232	665,197

EXHIBIT B

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF REVENUES AND EXPENSES
FOR THE YEAR ENDED MARCH 31, 1978
AND THE TEN MONTHS ENDED MARCH 31, 1977

FROM OPERATIONS		1978	1977
Revenues—			
Membership dues	\$305,351	264,547	
Interest and commissions	18,530	13,319	
Building lease income	10,805	5,910	
Tour income	1,573	—	
Membership Directory	3,627	11,503	
Underwriting and risk management surcharge income	3,125	—	
Transfer from loan and scholarship	5,000	—	
Miscellaneous	332	1,783	
	348,343	297,062	
Expenses—			
General membership—Schedule 1	236,034	179,617	
Depreciation	5,679	3,715	
Council—Schedule 2	27,653	5,191	
Student Loan Fund	—	7,500	
In-state travel	7,016	4,379	
Out-of-state travel	18,181	20,524	
OSMA Newsletter	2,290	1,369	
Commissions to county societies	4,000	3,475	
Membership directory	2,767	13,116	
AMA convention expense	2,966	—	
	306,586	238,886	
	41,757	58,176	

JOURNAL

Revenues—			
Subscriptions allocated from dues	17,812	3,500	
Advertising and sales	28,394	23,407	
	46,206	26,907	
Expenses—Schedule 1	87,243	61,318	
	(41,037)	(34,411)	

ANNUAL MEETING

Revenue	3,993	(84)
Expenses — Schedule 1	10,261	8,850
Excess (Deficit) of Revenue	(6,268)	(8,934)
Over Expenses—Exhibit C	\$ (5,548)	14,831

The accompanying letter and notes are an integral part of this statement.

EXHIBIT C

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF CHANGES IN FUND BALANCE
FOR THE YEAR ENDED MARCH 31, 1978
AND THE TEN MONTHS ENDED MARCH 31, 1977

	1978	1977
APPROPRIATED FOR PUBLIC EDUCATION		
Beginning of period	42,750	55,004
Less: Expenditures	(10,630)	(12,254)
End of period—Exhibit A	32,120	42,750
APPROPRIATED FOR BUILDING MAINTENANCE—		
Beginning of period	7,876	4,119
Interest earned	—	117
	7,876	4,236
Appropriation for period	—	3,640
End of period—Exhibit A	7,876	7,876
UNAPPROPRIATED—		
Beginning of period	320,106	308,915
Excess (Deficit) of revenues over expenses—Exhibit B	(5,548)	14,831
	314,558	323,746
Appropriated for building maintenance	—	(3,640)
End of period—Exhibit B	314,558	320,106
TOTAL	\$354,554	370,732

The accompanying letter and notes are an integral part of this statement.

EXHIBIT D

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF CHANGES IN
FINANCIAL POSITION FOR THE
YEAR ENDED MARCH 31, 1978
AND THE TEN MONTHS ENDED
MARCH 31, 1977

	1978	1977
FUNDS PROVIDED		
From operations —		
Excess (Deficit) of revenues over expenses —		
Exhibit B	(5,548)	14,831
Add: Expenses not requiring outlay of working capital in the current period —		
Depreciation —		
Note 1	5,679	3,715
Funds Provided From Operations	131	18,546
Retirement of property and equipment	—	6,012
Decrease in other assets	—	9
Increase in deferred income	40,879	35,426
	41,010	59,993
FUNDS APPLIED		
Transfer to building maintenance	—	3,640
Purchase of plant and equipment	5,108	24,162
Increase in working capital — Below	25,272	32,191
Decrease in appropriated for public education	10,630	—
	41,010	59,993

INCREASE (DECREASE) IN WORKING CAPITAL

<i>Current assets —</i>		
Cash	(44,591)	48,574
Savings accounts	72,919	108,469
Account receivable	2,998	(93,425)
Interest receivable	108	360
Prepaid expenses	1,172	(1,627)
	32,606	62,351
<i>Current liabilities —</i>		
Account payable	8,696	(41,305)
Accrued payroll taxes	826	(1,391)
Loan and scholarship payable	(16,856)	(197)
Due to building maintenance	—	479
Due to public education	—	12,254
	(7,334)	(30,160)
	\$ 25,272	32,191

The accompanying letter and notes are an integral part of this statement.

OKLAHOMA STATE MEDICAL ASSOCIATION
NOTE TO THE FINANCIAL STATEMENTS
MARCH 31, 1978 AND 1977

(1) Accounting Policies —

The following is a summary of certain significant accounting policies followed in the preparation of these financial statements.

Property and equipment —

Property is recorded at cost. Depreciation over the estimated useful lives of the property, except building, is determined on the straight-line basis. Depreciation is not provided on the building.

Deferred income —

Dues, *Journal* subscriptions and underwriting and risk management control surcharge income are prorated over the calendar years to which they apply.

(2) Deferred Income —

The following is a summary of deferred income as of March 31, 1978 and 1977:

	1978	1977
Dues	\$ 222,300	219,017
<i>Journal</i>	17,812	2,091
Underwriting and risk management surcharge	21,875	—
	\$ 261,987	221,108

(3) Building Maintenance Appropriation —

On August 10, 1975, the Board of Trustees adopted the procedure of appropriating 25 percent of the net operating revenues for each period retroactive to May 31, 1975.

(4) Public Education Appropriation —

During the fiscal year ended May 31, 1976, the Board of Trustees authorized the amounts collected through special assessments be transferred to the Public Education Appropriation. The appropriation will be used to inform the general public of governmental, legislative and bureaucratic regulation over the medical profession and the public.

(5) Professional Liability Stabilization —

The Professional Liability Stabilization Program was established during the year ended May 31, 1976 by assessing the doctors a 15 percent surcharge on

their basic professional liability policy. The Insurance Company of North America provides the basic \$100,000/\$300,000 policy. This money will be under the control of two trustees, one appointed by the Medical Association and one appointed by the insurer. As of March 31, 1978, the balance on deposit was \$219,995. The money will not be utilized unless all established reserves of the insurer are first exhausted through the payment of claims.

(6) Professional Liability Excess Coverage —

During the fiscal year ended March 31, 1977, an insurance plan was formed with Hartford and Lloyd's of London to provide excess professional liability coverage. The excess liability policy will cover losses in excess of \$100,000 and less than \$1,000,000 that exceed \$3.25 million per year. In accordance with the plan, a specified portion of the insurance premiums were deposited in a bank in the name of the Oklahoma State Medical Association. The balance of the account on March 31, 1978 was \$915,742. The funds will be used if the insurers' reserves are exhausted through payment of claims.

(7) Contingent Lawsuit —

During the fiscal year ended March 31, 1977, a lawsuit was filed in the state court naming the Oklahoma State Medical Association as a co-defendant. The lawsuit concerns a life insurance proposal by the plaintiff which was not accepted by the Medical Association. According to the Medical Association's legal counsel, the litigation is without merit.

(8) Change in Fiscal Year-End —

Effective in 1977, the Association changed its fiscal year-end from May 31 to March 31. All revenues and expenses shown for 1977 are for a ten-month period.

SUPPLEMENTAL MATERIAL

House of Delegates

Oklahoma State Medical Association
Oklahoma City, Oklahoma

Our examination of the financial statements included in the preceding section of this report was directed to an expression of our opinion on these statements taken as a whole. The supplemental material presented in the following section of this report has been subjected to certain audit procedures applied in connection with our examination of the financial statements. This information, while not considered necessary for the fair presentation of the financial position, results of operations and changes in financial position of the Association, is in our opinion fairly stated in all material respects when considered in relation to the financial statements taken as a whole.

Oklahoma City, Oklahoma
April 13, 1978

SCHEDULE 1
OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULES OF EXPENSES
FOR THE YEAR ENDED MARCH 31, 1978
AND THE TEN MONTHS ENDED MARCH 31, 1977

	1978	1977
GENERAL MEMBERSHIP EXPENSES		
Salaries	\$ 136,850	110,437
Payroll taxes	9,714	6,002
Pension costs	11,841	16,294
Office supplies	13,574	11,515
Legal and audit	8,832	4,537
Postage and shipping	12,633	12,190
Telephone and utilities	15,864	11,217
Dues and subscriptions	3,868	1,382
Repairs and maintenance	2,275	2,125
Insurance	17,140	9,440
Equipment rental	8,739	8,449
Staff and officers' expense	7,723	2,836
Awards	2,165	257
Data processing	680	—
Other general expense	4,804	9,481
Services	3,476	3,810
Overhead allocated to Journal	(13,883)	(21,505)
Overhead allocated to annual meeting	(10,261)	(8,850)
Total	236,034	179,617
JOURNAL EXPENSES		
Printing	28,262	18,986
Salaries	29,286	10,663
Advertising	12,656	8,262
Art work	1,536	1,118
Proofreading	635	393
Supplies	412	148
Other	573	243
Overhead allocated from general membership expenses	13,883	21,505
Total	87,243	61,318
ANNUAL MEETING EXPENSES		
Overhead allocated from general membership expenses	\$ 10,261	8,850

SCHEDULE 3
OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULE OF REVENUES AND EXPENSES
(COMPARED TO BUDGET)
FOR THE YEAR ENDED MARCH 31, 1978

	1978 ACTUAL	1978 BUDGET	BALANCE UNDER (OVER) BUDGET
FROM OPERATIONS			
Revenues—			
Membership dues	\$305,351	326,450	(21,099)
Interest and commissions	18,530	10,700	7,830
Building lease income	10,805	8,105	2,655
Tour income	1,573	—	1,573
Membership directory	3,627	3,500	127
Underwriting and risk management surcharge	3,125	—	3,125
Transfer from loan and scholarship	5,000	—	5,000
Miscellaneous	332	100	232
Total	348,343	348,900	(557)
Expenses—			
General membership—			
Schedule 4	236,034	263,975	27,941
Depreciation	5,679	5,000	(679)
Council—Schedule 5	27,653	8,525	(19,128)
In-state travel	7,016	5,675	(1,341)
Out-of-state travel	18,181	26,600	8,419
OSMA newsletter	2,290	—	(2,290)
Commissions to county societies	4,000	—	(4,000)
Membership directory	2,767	2,500	(267)
AMA convention expense	2,966	—	(2,966)
Total	306,586	312,275	5,689
	41,757	36,625	5,132
JOURNAL			
Revenues—			
Subscriptions allocated from dues	17,812	11,875	5,937
Advertising and sales	28,394	29,000	(606)
	42,206	40,875	5,331
Expenses—Schedule 4	87,243	70,375	(16,868)
Total	(41,037)	(29,500)	(11,537)
ANNUAL MEETING			
Revenues—	3,993	2,000	1,993
Expenses—Schedule 4	10,261	—	(10,261)
Total	(6,268)	2,000	(8,268)
Excess (Deficit) of Revenues Over Expenses	\$ (5,548)	9,125	14,673

SCHEDULE 2
OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULE OF COUNCIL EXPENSES
FOR THE YEAR ENDED
MARCH 31, 1978
AND THE TEN MONTHS ENDED
MARCH 31, 1977

	1978	1977
Council on Governmental Activities	\$ 15,365	355
Council on Professional and Public Relations	7,935	1,721
Council on Planning and Development	2,469	402
Council on Medical Education	467	—
Council on Medical Services	442	79
Council on Member Services	439	2,351
Council on Public and Mental Health	536	283
Total	\$ 27,653	5,191

SCHEDULE 4
OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULE OF EXPENSES
(COMPARED TO BUDGET)
FOR THE YEAR ENDED MARCH 31, 1978

	1978 ACTUAL	1978 BUDGET	BALANCE UNDER (OVER) BUDGET
GENERAL MEMBERSHIP EXPENSES			
Salaries	\$136,850	137,400	550
Payroll taxes	9,714	10,300	586
Pension costs	11,841	21,125	9,284
Office supplies	13,574	15,000	1,426
Legal and audit	8,832	5,900	(2,932)
Postage and shipping	12,633	15,750	3,117
Telephone and utilities	15,864	15,200	(664)
Dues and subscriptions	3,868	3,700	(168)
Repairs and maintenance	2,275	2,125	(150)
Insurance	17,140	12,250	(4,890)
Equipment rental	8,739	11,000	2,261
Staff and officers expense	7,723	3,675	(4,048)
Awards	2,165	350	(1,815)
Data processing	680	—	(680)
Other general expense	4,804	5,250	446
Services	3,476	4,950	1,474
Overhead allocated to Journal	(13,883)	—	13,883
Overhead allocated to annual meeting	(10,261)	—	10,261
Total	236,034	263,975	27,941

JOURNAL EXPENSES

Printing	28,262	24,600	(3,662)
Salaries	29,286	32,550	3,264
Advertising	12,656	10,700	(1,956)
Art work	1,536	1,500	(36)
Proofreading	635	500	(135)
Supplies	412	200	(212)
Other	573	325	(248)
Overhead allocated from general membership expense	13,883	—	(13,883)
Total	87,243	70,375	(16,868)

ANNUAL MEETING EXPENSES

Overhead allocated from general membership expenses	\$10,261	—	(10,261)
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SCHEDULE 5

**OKLAHOMA STATE MEDICAL ASSOCIATION
SCHEDULE OF COUNCIL EXPENSES
(COMPARED TO BUDGET)
FOR THE YEAR ENDED MARCH 31, 1978**

	1978 ACTUAL	1978 BUDGET	BALANCE UNDER (OVER) BUDGET
Council on Governmental Activities	\$15,365	475	(14,890)
Council on Professional and Public Relations	7,935	4,000	(3,935)
Council on Planning and Development	2,469	525	(1,944)
Council on Medical Education	467	—	(467)
Council on Medical Services	442	100	(342)
Council on Member Services	439	3,050	2,611
Council on Public and Mental Health	536	375	(161)
Total	\$27,653	8,525	(19,128)

**Report of the
COUNCIL ON PLANNING AND
DEVELOPMENT
(APPROVED)**

INTRODUCTION:

The Council on Planning and Development was created two years ago when the House of Delegates approved the re-organization of OSMA's council and committee structure. The Council's principal function is to coordinate the activities of the eight operational councils in an effort to maximize the effectiveness of the Association's limited financial and staff resources. Each year the Council submits to the House of Delegates an annual program of activities which prioritizes the recommendations of the councils.

REVIEW OF ACTIVITIES:

The Council meets twice each year — once in the fall to review the progress of each council in achieving its stated objectives, ie, to review their priorities, and once in the spring to review council recommendations and write the annual program of activities. The planning process is working extremely well, as evidenced by the accomplishments detailed in the

various reports. All of the councils have done superlative jobs and association members owe a debt of gratitude to the Council chairman. The Council on Planning and Development feels C. Alton Brown, MD, Chairman of the Council on Members Services, should receive a special citation for the excellent malpractice insurance program he has successfully negotiated with the Hartford Insurance Companies.

The Council recently spent two days reviewing the various reports and discussed the proposed programs for next year. Suggested changes have been incorporated into the reports prepared for the House of Delegates and the Council urges all members to study the proposed work program. It is ambitious and will require considerable physician effort.

Each council has prepared a detailed budget for its activities in an attempt to more accurately report association expenditures by program. The accounting system has been adjusted to permit a more accurate allocation of expenses. The councils' proposed budget for 1978-79 is not a request for new funds over and above 1977-78 expenditures. A portion of each budget reflects a reallocation of some administrative expenses.

Most of the councils have recommended a continuation of last year's programs, but two councils are recommending that pilot projects started last year and paid for from special funds now be assumed and paid for from the general fund. These two programs (if approved by the delegates) and normal inflationary pressure will require some adjustment in membership dues structure.

A. COUNCIL ON MEDICAL SERVICES —
The Council recommends a continuation of existing programs, plus support for an educational program to inform OSMA members of recent changes in Oklahoma's workers' compensation law. Budget requests are:

Peer Review Committee (copying, medical records, committee meetings, special correspondence)	\$ 500.00
Oklahoma Council for Health Careers (physician placement)	2,000.00
Workers Compensation Task Force (seminars, manuals, special mailings)	500.00
Sports Medicine Committee (support for AMA resolution and support for sports seminar)	*500.00
Socioeconomic Courses (two meetings)	500.00
Total	\$4,000.00

B. COUNCIL ON MEMBERS SERVICES —
The Council asks for a continuation of existing

programs, the approval of a new underwriting and risk management program, and authority to investigate the propriety of an association-sponsored group health benefit program. Budget requests are:

Underwriting and Risk Management Program (four newsletters, two medical-legal seminars)	(1) \$1,000.00
Support of Students, Residents and Auxiliary	2,000.00
Total	\$3,000.00

(1) To be reimbursed by Hartford Insurance Company.

C. COUNCIL ON GOVERNMENTAL ACTIVITIES — The Council recommends a more aggressive program at the federal level, including a continuation of the Washington, D.C. representative, more newsletters and more trips to Washington, D.C. Budget requests are:

Washington, D.C. Representative and Trips	*\$16,200.00
State Legislative Committee	600.00
Newsletters	2,500.00
Health Forums	1,000.00
Total	\$20,300.00

D. COUNCIL ON PROFESSIONAL AND PUBLIC RELATIONS — The Council plans to continue programs currently underway and asks that their entire budget be funded from the Association's general fund in lieu of using the special public education fund established in 1974. Several of the projects completed this year were paid for with the special funds as proposed last year. The Council's successes — most notably the membership brochure, *The Journal* award, and public service announcements — testify to the wisdom of financing a well-rounded P.R. program. Budget requests are:

Media Award	\$ 500.00
Media Relations	750.00
Medical Update	*3,000.00
Public Service Announcements	*10,000.00
Video-Cassette Recorder	2,000.00
Journal Articles	2,000.00
Consultants	*4,000.00
Brochure on Doctor/Patient Relationship	*1,000.00
Total	\$23,250.00

E. COUNCIL ON PUBLIC AND MENTAL HEALTH — The Council plans to continue a statewide CPR program, develop programs on health education to be presented by physicians in their local schools, and to provide support for committees on environmental quality and maternal mortality and to the perinatal task force. Budget requests are:

CPR Training Programs	**\$1,000.00
Health Education	*500.00
Environmental Quality	*500.00
Maternal Mortality	*250.00
Perinatal Task Force	*500.00
Total	\$2,750.00

F. COUNCIL ON SCIENTIFIC ASSEMBLY — The Council will produce continuing medical education programs and will seek to be approved by LCCME as a co-sponsor of medical education courses. Budget requests are:

CME Course, Development and Promotion	\$1,500.00
Application Fee to LCCME	*500.00
Total	\$2,000.00

G. COUNCIL ON MEDICAL EDUCATION — The Council will continue its hospital accreditation program and will consider ways to help smaller rural hospitals develop certifiable CME courses. It will maintain liaison with the OUHSC. Budget request is:

Total	\$2,500.00
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**Of budgeted CPR Training Programs \$1,000.00, \$250 is new budget money (see above).

H. COUNCIL ON PLANNING AND DEVELOPMENT — The Council holds two meetings each year to review the Association's activities and to plan the work program for the next year. The Association pays the lodging expenses for one of the meetings and the individual members pay their own expenses for the other. Since physicians incur considerable expenses traveling to and from the meeting, plus the cost of the meeting, it is recommended that the Association pay the full amount of both meetings.

Budget request is:	\$2,000.00
Total	\$2,000.00

RECAPITULATION:

	Request	*New Money
Medical Services	\$4,000	\$ 500
Members Services	3,000	—
Governmental Activities	20,300	16,200
Professional and Public Relations	23,250	18,000
Public and Mental Health	2,750	2,000
Scientific Assembly	2,000	500
Medical Education	2,500	—
Planning and Development	\$4,000	2,000
Total Budget Request	\$61,800	\$39,200

SUMMARY AND RECOMMENDATIONS:

As stated earlier, the Council on Planning and Development spent two days reviewing the various council reports and recommends that the program of activities outlined above be approved by the Board of Trustees and the House of Delegates.

The Council has compared the activities of OSMA with those of other state medical societies and we are convinced that our association provides a wider range of quality benefits to its members than most state societies. Oklahoma currently ranks 36th in the cost of as-

sociation membership, as compared with other states, but it ranks extremely high in services that it provided to its members. Programs initiated by OSMA have become national examples and our activities within organized medicine have continuously received support from many of the larger and more politically powerful associations. The Council on Planning and Development feels the OSMA membership wants quality benefits and a viable, active state medical association, and realizes that to have such requires sufficient financing. After considerable discussion it was the unanimous recommendation of the Council that the Board of Trustees recommend to the House of Delegates a \$30.00 dues increase, to take effect on January 1, 1979. Such dues increase would restore and build the association's surplus and provide sufficient operating capital for several years. The Council would also like to point out that there has been no change in the association's dues structure since 1976.

Report of the
CONSTITUTION AND BYLAWS COMMITTEE
(APPROVED)

The Constitution and Bylaws Committee is responsible for providing the delegates properly phrased and referenced amendments for consideration. The Committee has the right to originate changes to the constitution and bylaws and may take positions on proposed changes submitted by individuals or component societies.

The committee has no recommended changes to propose. However, two resolutions pending before the house would require an amendment to the bylaws. Resolutions No. 3 and No. 5 would change the association's current requirement that members of OSMA also be members of AMA. Should the resolution be adopted, the following amendment to the bylaws must be adopted by the delegates.

Amend Chapter I, Section I, by deleting the last sentence:

Section 1.00 BASIC REQUIREMENTS. All membership in the Oklahoma State Medical Association shall originate in component societies. Except as otherwise provided, membership in a component society and in this association shall be granted only to residents of Oklahoma who are citizens or who have filed a declaration of intent to become citizens of the

United States, and to doctors of medicine who shall have received that degree from an educational institution approved by the Board of Trustees, and who are licensed by the Oklahoma State Board of Medical Examiners.

Respectfully submitted,
Lewis C. Taylor, MD
Jerold D. Kethley, MD
George H. Garrison, MD
Floyd F. Miller, MD
Richard C. Wade, MD
Bob J. Rutledge, MD

Resolution: 1
(DISAPPROVED)

SUBJECT: Sexual Reassignment Surgery
INTRODUCED BY: W. T. Holland, MD, Tulsa
REFERRED TO: Reference Committee II

WHEREAS, The concept of transsexualism (Gender Disphoria Syndrome) has no commonly accepted scientific validity; and

WHEREAS, The bulk of patients seeking sexual reassignment surgery (sex-change) are diagnosed as polymorphous perverse, borderline, eonists, masochists and sadists, stigmatized homosexuals, aging transvestites, schizoids, incipient schizophrenics and as having organic conditions; and

WHEREAS, Major Gender Identity Clinics across the country agree the problem (GDS) is psychological and not surgical; and

WHEREAS, Such sexual reassignment surgery is meeting with increasing resistance both in the medical and lay health organizations; and

WHEREAS, The practice of sexual reassignment surgery has no constructive teaching significance to medical students of Oklahoma; and

WHEREAS, The existence and availability of sexual reassignment surgery gives false hope to psychologically disturbed individuals and discourages the use of psychological methods; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby petitions proper state officials to prohibit the performance of sexual reassignment surgery in the University Hospitals of Oklahoma.

Resolution: 2
(APPROVED AS AMENDED)

SUBJECT: Publication of Medicare Reimbursement Lists

INTRODUCED BY: Blaine County Medical Society

REFERRED TO: Reference Committee I

WHEREAS, The Department of Health, Education, and Welfare has directed Medicare and Medicaid carriers to publish annually a list of recipients of "assigned" and "unassigned" federal funds paid by said carriers; and

WHEREAS, The physician so named may receive federal "assigned" funds but *never* "unassigned" funds; and

WHEREAS, Publication of "unassigned" funds next to a physician's name strongly but wrongfully implies that said physician actually received said funds; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association go on record as strongly condemning such publication in the present form as misleading to the public and unfair to the physician who did not receive "unassigned" funds as listed; and be it further

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association demand of the Department of Health, Education, and Welfare that "unassigned" funds not be published next to a physician's name as such a juxtaposition wrongfully implies that the physician actually received those federal funds; and be it further

RESOLVED, That "unassigned" funds should be published beside the name of the patient receiving the reimbursement.

Resolution: 3
(DISAPPROVED)

SUBJECT: Compulsory AMA Membership
INTRODUCED BY: W. T. Holland, MD, Tulsa
REFERRED TO: Reference Committee III

WHEREAS, Oklahoma is one of only five state medical associations which still require compulsory membership in the American Medical Association; and

WHEREAS, We live in a democratic society which is founded upon freedom of association, voluntary participation and equal representation; and

WHEREAS, Compulsory (guaranteed) membership in the American Medical Association has lessened the influence our local and state medical associations have with the AMA; therefore be it

RESOLVED, That the Oklahoma State Medical Association will no longer require

compulsory membership in the American Medical Association.

Resolution: 4

(APPROVED AS AMENDED)

SUBJECT: Reinstatement of AMA's Sports Medicine Committee

INTRODUCED BY: OSMA Council on Medical Services

REFERRED TO: Reference Committee I

WHEREAS, The American Medical Association had a viable Sports Medicine Committee until it was abolished on January 1, 1977; and

WHEREAS, Sports plays an integral part in the lives of millions of Americans; and

WHEREAS, An increasing number of lawsuits involving sports injuries are now pending in the courts and threaten to have a pronounced effect on the sports activities of millions of Americans and thousands of schools and organizations; and

WHEREAS, These cases can only have an increasing effect on the physicians who treat these patients; therefore be it

RESOLVED, That the American Medical Association's House of Delegates hereby directs the Board of Trustees to reinstate the AMA Sports Medicine Committee.

Resolution: 5
(DISAPPROVED)

SUBJECT: Compulsory AMA Membership
INTRODUCED BY: Harvey L. Gaspar, MD, Tulsa

REFERRED TO: Reference Committee III

WHEREAS, Membership in the AMA is voluntary and is not a prerequisite for the practice of quality medicine; and

WHEREAS, Membership in the state medical society is voluntary and is not a prerequisite for the practice of quality medicine, nor a legal requirement in the state of Oklahoma; and

WHEREAS, Membership in the various county medical societies is voluntary and not a prerequisite for the practice of quality medicine, nor a requirement for the practice, by law, in the state of Oklahoma; and

WHEREAS, The three organizations involved represent differing political viewpoints, at national, state and county level; and

WHEREAS, The AMA is not affiliated with the state and local county medical associations, in forty-five states, of these United States; and

WHEREAS, The political viewpoints expressed and fostered by the American Medical

Association may not be coincident with the desires and political viewpoints of the Oklahoma State Medical Association; therefore be it

RESOLVED, That the Oklahoma State Medical Association and its county society affiliates withdraw their mandatory requirement for all members to belong and pay dues to the American Medical Association, thus restoring freedom of choice.

Resolution: 6

(APPROVED AS AMENDED)

SUBJECT: Compulsory Continuing Medical Education

INTRODUCED BY: Oklahoma County Delegates

REFERRED TO: Reference Committee II

(1) That the House of Delegates go on record as being totally opposed to relicensure in any form, from any source.

(2) That the House of Delegates go on record as being totally opposed to National Health Insurance in any form, from any source.

(3) That the OSMA be instructed to use all efforts and means to the bitter end to insure these resolves.

(4) That CME be continued as it now is for a period of three years.

(5) That at the end of that period and prior to the OSMA meeting of 1981 that a self addressed, stamped post card with the two questions

— I favor continuing CME as mandatory

— I favor CME be changed to a voluntary basis

be sent to every member of OSMA.

(6) That the cards not be signed, so each physician may answer as his conscience dictates, without fear of peer pressure.

(7) That the regional and County Medical Societies Boards of Directors be assigned the task of insuring a return card from each member.

(8) That the OSMA be given the cards and tabulate the results.

(9) That the results be presented to the House of Delegates, and the House of Delegates be instructed to vote into policy the majority vote.

Resolution: 7

(APPROVED)

SUBJECT: Appreciation to Scott Hendren, MD

INTRODUCED BY: Oklahoma County Medical Society

REFERRED TO: Reference Committee III

WHEREAS, Scott Hendren, MD, has served as President of both the Oklahoma County Medical Society and the Oklahoma State Medical Association and has served on numerous councils and committees; and

WHEREAS, Doctor Hendren has effectively and tirelessly served as OSMA Delegate to the American Medical Association 1970-1978; and

WHEREAS, He has represented Oklahoma doctors in an exemplary and enviable manner; now therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby conveys its sincere appreciation to Doctor Hendren for his outstanding leadership and for the many contributions he has made to organized medicine and to his fellow physicians.

Resolution: 8

(APPROVED AS AMENDED)

SUBJECT: Inappropriate JCAH Requirements for Hospital Accreditation

INTRODUCED BY: Kingfisher County Medical Society

REFERRED TO: Reference Committee I

WHEREAS, The Joint Commission on Accreditation of Hospitals has shown a progressive degeneration in the fitness of their requirements for accreditation, and an increasing obsession with legalisms and paper-shuffling as a prerequisite for accreditation; and

WHEREAS, the JCAH is losing sight of quality patient care as the prime objective of accreditation; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association recommends to the American Medical Association representative on the JCAH Board of Directors that JCAH policy be modified to include standardization of evaluation criteria which result in uniform inspections; and be it further

RESOLVED, That the JCAH be directed to return to its founding principal of accreditation for quality patient care.

Resolution: 9

(APPROVED)

SUBJECT: Oklahoma Utilization Review System

INTRODUCED BY: Council on Medical Services

REFERRED TO: Reference Committee I

WHEREAS, The increasing cost of medical services has become a matter of grave concern within and outside the profession; and

WHEREAS, The hospital cost component of the total expenditures for health services has shown the greatest increase of all components; and

WHEREAS, Demonstrations have shown that effective utilization of hospital services can effectuate substantial savings; and

WHEREAS, Voluntary utilization review programs have proven to be effective, witness the success of the Oklahoma Utilization Review System (OURS); and

WHEREAS, The success of the OURS program was demonstrated with a savings of up to \$15 million in Medicare and Medicaid funds through non-utilization even though it was a voluntary physician and hospital program with limited funding; and

WHEREAS, The external computerized monitoring program developed by OURS appears to be an extraordinarily cost effective approach to cost containment; therefore be it

RESOLVED, That the American Medical Association be encouraged to develop an information kit about the Oklahoma Utilization Review System to be made available to county and state medical societies and other medical organizations interested in voluntary utilization review programs through its Medical Services Council; and be it further

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association directs the above resolution to the attention to the AMA House of Delegates.

Resolution: 10

(APPROVED AS AMENDED)

SUBJECT: Increasing Rural Oklahoma Physician Manpower

INTRODUCED BY: Pittsburg County Medical Society

REFERRED TO: Reference Committee II

WHEREAS, There is a demonstrated need for additional physicians in rural Oklahoma; and

WHEREAS, There are many programs designed to alleviate the shortage of doctors in non-metropolitan areas; and

WHEREAS, Since the 1969 Report of the Council on Rural Health, OSMA has advocated an aggressive physician recruitment and placement program; and

WHEREAS, Existing efforts, while well intentioned, have not materially affected the im-

balance of physicians in rural areas; and

WHEREAS, No definitive study has adequately assessed the need for physicians in Oklahoma by community; and

WHEREAS, The Oklahoma State Medical Association has a responsibility to its members and to the public to aid in solving the physician distribution problem; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association supports the efforts of previous resolutions of the Oklahoma State Medical Association's Board of Trustees to:

1. Endeavor to identify the physician manpower needs of each Oklahoma community; and

2. Assist in the recruitment of physicians and their families for rural Oklahoma; and

3. To establish a system for liaison with physicians in teaching positions, students and residents for the purpose of providing insight into the economic and professional advantages of rural medical practice.

Resolution: 11

(APPROVED)

SUBJECT: Requiring Immunizations of Children in Child Care Facilities

INTRODUCED BY: Tulsa County Medical Society

REFERRED TO: Reference Committee II

WHEREAS, Effective immunizations exist and are available to all Oklahoma children for the prevention of certain communicable diseases, including measles, rubella, polio, diphtheria, whooping cough, and tetanus; and

WHEREAS, State legislation requires that all children entering school in Oklahoma be immunized against these diseases; and

WHEREAS, These diseases pose an even more serious threat to the pre-school child than to the school age child; and

WHEREAS, Accepted immunization standards recommend that immunizations be started in infancy; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association supports the enactment of appropriate legislation in the state of Oklahoma which would require immunizations, according to recommended procedures, of all children enrolled in child care facilities in the state of Oklahoma. Such legislation should provide for exceptions as presently included in the School Immunization Law; and be it further

RESOLVED, That copies of this resolution

be submitted to all members of the Legislature of the State of Oklahoma urging their enactment of such legislation in the 1979 legislative session.

Resolution: 12
(APPROVED)

SUBJECT: AMA Public Relations Program
INTRODUCED BY: Council on Professional and Public Relations
REFERRED TO: Reference Committee II

WHEREAS, Effective public relations is essential to any endeavor and is especially important to medicine; and

WHEREAS, The medical profession has always willingly accepted its responsibilities to the public . . . our patients; and

WHEREAS, Without effective public relations and unless the public has a thorough understanding of our health care system, the private practice of medicine cannot survive in this country; and

WHEREAS, Our health care system has proven over the years to be superior, both in terms of cost and delivery; and

WHEREAS, Unless the public is armed with all available information, it cannot be expected to fully understand the advantages of our present health care system; and

WHEREAS, The American Medical Association has now begun to develop many of the components of a successful public relations/advertising program which is so essential to the future of our profession; therefore be it

RESOLVED, That the House of Delegates of the American Medical Association hereby commends the officers and staff for their efforts in this area; and be it further

RESOLVED, That the House of Delegates hereby fully endorses aggressive public relations/advertising as a method of explaining and developing support for our current health care system; and be it further

RESOLVED, That the House of Delegates of the American Medical Association hereby instructs the officers and staff to continue to develop and expand the AMA public relations/advertising program as long as it is in the best interest of both the public and the profession.

Resolution: 13
(APPROVED)

Continued on page 276

Brief Summary of Prescribing Information
Combined TEGOPEN® (cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) TEGOPEN 9/11/75

Indications: Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

Important Note: When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

Contraindications: A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication. **Warning:** Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established. **Precautions:** The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

Adverse Reactions: Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

Usual Dosage: Adults: 250 mg. q. 6h.

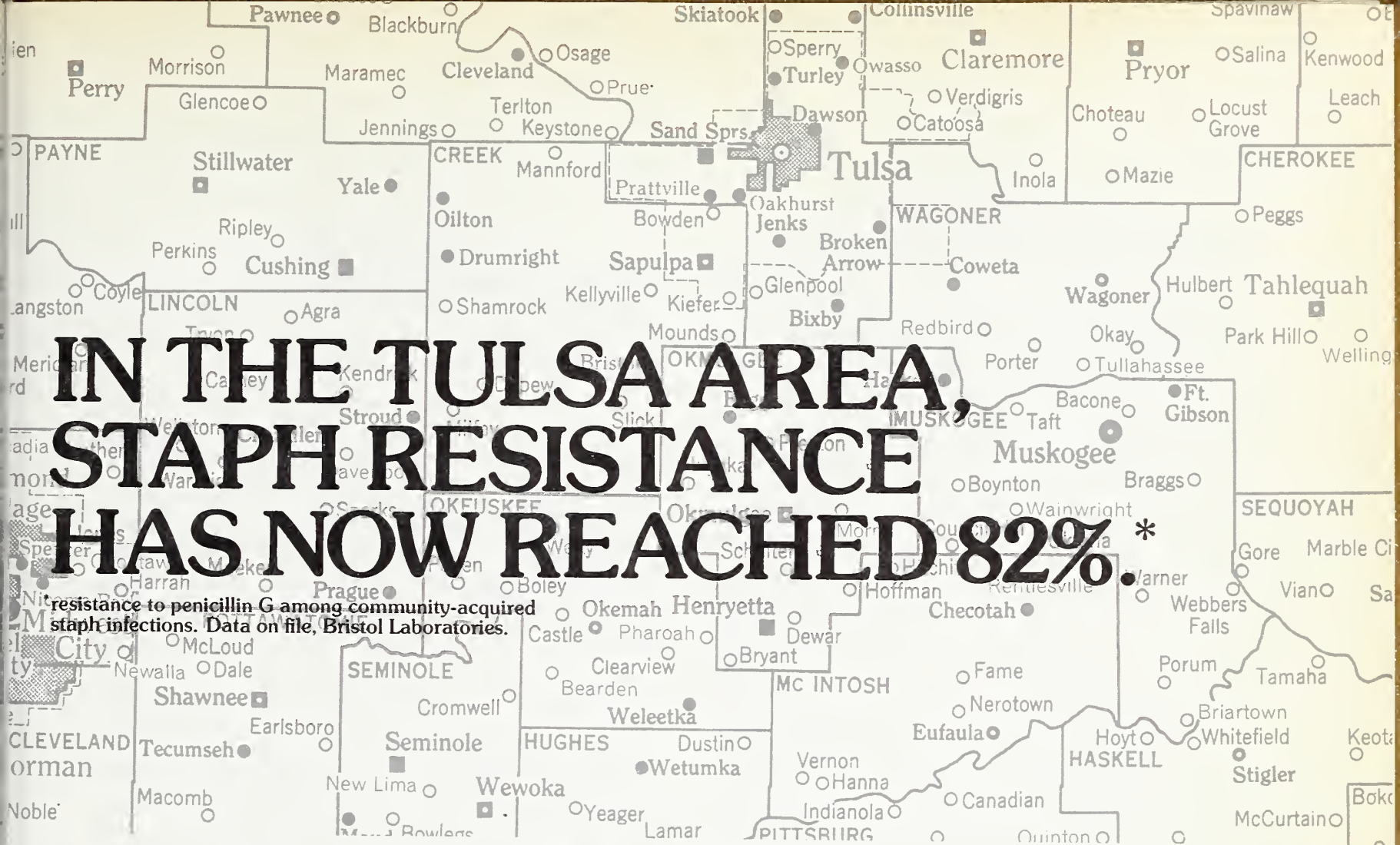
Children: 50 mg./Kg./day in equally divided doses q. 6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

Supplied: Capsules—250 mg. in bottles of 100, 500 mg. in bottles of 100. Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.



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Division of Bristol-Myers Company
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IN THE TULSA AREA, STAPH RESISTANCE HAS NOW REACHED 82%.*

*Resistance to penicillin G among community-acquired staph infections. Data on file, Bristol Laboratories.

WHEN YOU CAN'T RULE OUT STAPH, CONSIDER
TEGOPEN[®]
(cloxacillin sodium)
“THE PENICILLIN OF TODAY”

- Effective against nonpenicillinase-producing staphylococci, beta-hemolytic streptococci, and pneumococci.†

†NOTE: The choice of Tegopen should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates that the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semisynthetic penicillin. The clinical significance of *in vitro* data is unknown.

- 10 times more active against strep than staph.
- Well absorbed from the G.I. tract.‡

‡Maximum absorption occurs when Tegopen is taken on an empty stomach, preferably 1-2 hrs. before meals.



Please see brief summary
for prescribing information.

Continued from page 274

SUBJECT: Health Education in Schools
INTRODUCED BY: Council on Public and
Mental Health

REFERRED TO: Reference Committee II

WHEREAS, Proper instruction in health education is essential to the health of our population; and

WHEREAS, The Oklahoma State Medical Association has previously clearly and precisely expressed its support for a health education curriculum in private and public schools; and

WHEREAS, Oklahoma doctors are increasingly concerned about the lack of a defined health education program for Oklahoma children; and

WHEREAS, The lack of such a program and the lack of an understanding of the principles of human physiology is evidenced by the large number of teenage pregnancies, by the use of harmful drugs, by the increasing number of young people who use both tobacco and alcohol products, and by a general disregard and/or misunderstanding of the importance our personal habits play in our health; and

WHEREAS, Over 200 physicians in this state have volunteered to give freely their time and expertise in order to make health education available in our schools; therefore be it

RESOLVED, That the Oklahoma State Medical Association and the physicians of this state once again go on record as strongly encouraging comprehensive health education for both public and private schools, kindergarten through twelfth grade; and be it further

RESOLVED, That the Oklahoma State Medical Association, through the Council on Public and Mental Health, agrees to cooperate in this program by providing physicians whenever possible to conduct health education programs in our schools; and be it further

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby encourages students and parents alike

to take an active interest in their health by supporting this program.

Late Resolution: No. 14

(APPROVED)

SUBJECT: Community Hospitals
INTRODUCED BY: Council on Planning and
Development

REFERRED TO: Reference Committee I

WHEREAS, It is the inherent right of the citizens of a community to determine and plan for the building, financing and operation of their community health care facilities; and

WHEREAS, Local community hospitals are unique institutions developed by local business and community leaders, local physicians and other health care professionals to serve the citizens of the community as they determine; and

WHEREAS, A voluntary health care system built on local planning and determination has developed an effective and comprehensive hospital system for the United States; and

WHEREAS, The community hospital system provides for the efficient delivery of quality medical services unequalled in the world; therefore be it

RESOLVED, That the House of Delegates of the Oklahoma State Medical Association hereby petitions the American Medical Association to embark upon a campaign to impress the public with the necessity of supporting this unique American institution.

Late Resolution: 15

(APPROVED)

SUBJECT: National Commission on the Cost
of Medical Care

INTRODUCED BY: Council on Planning &
Development

REFERRED TO: Reference Committee I

WHEREAS, Escalating medical care costs are a major concern of the American public and physicians; and

WHEREAS, This concern has resulted in a large number of cost containment programs initiated on a voluntary basis; and

(Continued on Page VIII)

FINANCING FOR OFFICE BUILDINGS AND CLINICS

9½% — 25 years

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MORE FEVER

I understand that Mr. Califano has now proposed that Blue Cross and Blue Shield Plans which have governing boards or physician-reimbursement committees comprised mostly of members who have "a strong financial stake in the health care industry" be prohibited from settling Medicare or Medicaid claims.

Viewed cursorily, the proposition seems merely run-of-the-mouth stuff from the Secretary. Hardly worth a raised eyebrow. However, closer examination is warranted and will reward the thoughtful members of his audience with a broader understanding of the Washington sickness, Potomac fever.

Obviously, the proposer of such prohibitions believes that "people out there" can't be trusted to disburse money. In this case, specifically, the untrustworthy people are those who provide health care to the citizens of this country and the money they are disbursing is designated to pay for health care previously rendered in good faith by the same untrustworthy people.

Another symptom of the fever is Mr. Califano's tycoon-like attitude toward the money he has been hired to disburse. Of course it is mailed to Washington by "the people out there" — including the untrustworthy ones — and, after it gets there it becomes government property; seemingly the personal fortunes of whatever bureaucrats happen to be hired by the politicians in power. The bureaucrats then emerge as mail-order millionaires, delivering what they select regardless of what was ordered. In spite of the considerable shrinkage

which affects the mailed-in money (the politicians help themselves to what they think they are worth and pay the bureaucrats to collect and then disburse it) there are still enough fortunes in the countless federal budgets to create a countless number of government-issue tycoons.

Note, also, that the Secretary's proposition does not concern itself with qualifications but with disqualifications. There is no appeal for understanding or objectivity or integrity or compassion or even literacy. There is only the pronouncement of categorical disqualification, issued with a threat which, if executed, would disrupt the already muddled and cumbersome health-administration industry for years and add more millions to the non-productive costs of the program.

In pursuit of his convictions, Mr. Califano says he will ask the governors of states which have laws requiring provider majorities on some Blue Cross/Blue Shield governing boards to seek modifications of such laws. In his efforts to persuade the governors, it is presumed he will convince them, through the presentation of facts, figures and statistics, that people who provide health care in their states cannot be trusted to determine who should be paid or what care should be paid for. Also, it is presumed, he will define for the several governors, just which of their residents do not have a "strong financial stake in the health care industry." And, it should be added, the way the Washington sickness is afflicting it.

Demagoguery and paternalism are epidemic along the banks of the Potomac; frequently obscure but pathognomonic symptoms of the fever which is characteristic of the region. *MRJ*

Consistency.

Defined by Webster as "Agreement or harmony of parts or features to one another or a whole . . . ability to be asserted together without contradiction."

Consistency is a goal that all of us in the medical profession strive for;

to be consistent in diagnosis and treatment and to be consistent in the caring for our patients. Unfortunately consistency is not always the goal of those around us.

For example, all of us, including some HEW officials, recognize that the cost of medical care presents a problem. We do not all agree on how this problem should be solved, but at least most of us recognize this as a problem. Many HEW officials have been critical of the medical profession for not finding solutions to the problem of rising costs, and Illinois Congressman Dan Rostenkowski recently challenged the profession to come up with workable solutions on our own. To this end voluntary committees have been formed in many states, and the process of problem solving has already begun. However, suddenly it appears that HEW may not *allow* us to solve the problem.

HEW general counsel Peter Libassi is now trying to influence the Justice Department to defer anti-trust exemptions for these voluntary efforts. While Secretary Califano accuses the profession of being self-centered and not working in the interests of the public, his chief legal counselor undermines these very efforts. This is an act that is clearly consistent with HEW's inconsistency.

Equally consistent is the position Medicare and Medicaid attorneys take on the release of information. According to "legal experts" Medicare and Medicaid have a legal responsibility to identify physicians and to list the fees we receive . . . both assigned and unassigned. These same legal experts, however, recently told the Oklahoma State Medical Association



that they could not provide us with a list of Medicare and Medicaid beneficiaries because this would be a violation of privacy. So in their consistently inconsistent manner of reasoning, it is legal and ethical to print and publicly distribute the names of physicians and the amount of money we allegedly receive from Medicare and Medicaid, but it is neither legal nor ethical to provide us with a list of Medicare and Medicaid beneficiaries.

Such examples are almost endless. "Physicians' fees vary too much, but California Relative Value Scales are a potential price fixing mechanism."

"Pharmaceutical advertising drives up the cost of medications, but physician advertising would lower fees."

"The American Medical Association artificially limits the number of physicians who are trained, thereby driving up the cost of medical care; there are too many physicians and therefore a great deal of unnecessary surgery."

"We must maintain the high standards of the American health care system, but new medical techniques are too expensive."

"There is too much unnecessary surgery, and the machines to prevent this are too expensive."

The list goes on and on.

The AMA testified recently in favor of a federal Sunset Act which would subject federal programs to review and budget reauthorization at least every six years. The purpose, said the AMA, is "To untangle the bureaucratic web which appears to be trapping every American citizen."

Whether or not Congress can untangle the bureaucratic maze it largely created is unclear. It appears to me that Congress' reasoning is a bit inconsistent . . . a case of the pot calling the kettle black. But then again, most people in Washington are consistently inconsistent.

Marvin K. Margo M.D.

Physicians Who Employ Physicians Assistants: Results of a Survey

JANICE WOERTH, MPH
ROBERT F. HILL, PHD
THOMAS R. GODKINS, PA

The P.A.s employed by Oklahoma physicians have proved to be an asset by increasing the physician's time for leisure, for continuing education and by increasing the physician's net income. Is a P.A. in your future?

It was realized by Congress in the 1970's that greater use of personnel qualified to assist and extend the care provided by the physician was needed to meet the growing demands for health care in the United States. Thus in Public Law 93-641, the National Health Planning and Resources Development Act of 1974, there was included a national health priority for "the training and increased utilization of physician assistants."¹

There was, at the introduction of Physician Assistants (P.A.s) into the health care delivery

system in 1965, a great deal of apprehension in the medical field. This apprehension concerned the acceptability of P.A.s by physicians and patients, the quality of care that P.A.s were capable of rendering, and the location and practice specialty that P.A.s would tend to seek for employment. If P.A.s were to be successfully integrated into the health care delivery system then they had to be acceptable to physicians and patients, render quality health care, be able to increase a physician's productivity, and address the maldistribution problem of health care professionals. Attempting to fulfill these expectations was an enormous responsibility for the developers of the first P.A. programs but a recent survey of Oklahoma physicians employing P.A.s shows that success in most areas of P.A. integration has been achieved, at least in Oklahoma.

The following findings are based on a questionnaire sent in 1977 to all Oklahoma physicians presently employing a P.A. A response rate of 83%, fifty-three responses, was obtained for this study after a second mailing.

In our survey it was found that the majority of Oklahoma's P.A.s are practicing outside of the larger metropolitan areas. This tendency of the P.A. to select smaller communities in which to practice is in keeping with national findings. A Department of Health, Education and Welfare

report on physician extenders revealed that P.A.s were the most likely of all physician extender types to practice outside of the Standard Metropolitan Statistical Areas.²

The following tables show the distribution of P.A.s in Oklahoma. Table 1 depicts the distribution of P.A.s by population size of the town within which the P.A. is employed. Table 2 shows the type of practice in which Oklahoma P.A.s are employed.

TABLE 1

Population	Number of P.A.s	(percent)
0 - 4,999	15	(28.3)
5,000 - 9,999	5	(9.4)
10,000 - 24,999	8	(15.1)
25,000 - 49,999	12	(22.65)
50,000-99,999	1	(4.9)
100,000 - over	12	(22.65)

TABLE 2

Practice Type	Number of P.A.s	(percent)
Solo	25	(47.2)
Partnership	6	(11.3)
Group	9	(17.0)
Institutional	13	(24.5)

The average age of physicians employing P.A.s in this survey was found to be 48.2 years. The average length of time that the physicians had been in practice was 23.8 years.

Of the fifty-three respondents it was found that 58.5% (31) of the P.A.s were employed by physicians in general/family practice; 17% (9) were employed by internists; and 5.7% (3) by orthopedic surgeons. Of the remaining P.A.s, 3.8% (2) each were in pediatrics, urology, and surgery and 1.9% (1) each were in public health, cardiology, OB/GYN, and hematology. The large percent of P.A.s employed in general/family practice settings supports the findings from a recent national survey.³

The acceptance of the P.A. by physicians, nurses, and patients has been an area of consternation to some. Our survey indicates that there is a varying degree of acceptability among the different groups of people with whom the P.A. has professional contact. Table 3 depicts the perceptions of the employing physician respondents.

In examining the overall acceptance rating of the P.A. it appears that those who have the most contact with the P.A. are more likely to have

TABLE 3

Group	Complete Acceptance	Acceptance with Reservations	Poor Acceptance
You	84.9%	11.3%	1.9%
Patients	52.8%	45.3%	1.9%
Office Nursing Staff	69.8%	20.7%	5.7%
Hospital Nursing Staff	49.0%	34.0%	13.2%
Hospital Administration	50.9%	34.6%	11.3%
Other Physicians			
in Practice	42.9%	50.0%	7.1%
Community Physicians	30.2%	52.8%	11.3%

complete acceptance of him, i.e. those with whom he works daily. It can be inferred that these people, the physician employer and the office nurse staff, would be most aware of what the P.A. is capable of doing. They would be in the best position to decide if he fulfills his medical responsibilities in a satisfactory manner. The authors believe that it is this individual awareness of the P.A.'s general area of medical services and the P.A.'s ability to satisfactorily render these services that is the critical turning point in P.A. acceptance. Levine, et al., in a study of patient attitudes towards the P.A. found:

Relatively few significant differences exist in patient satisfaction between those patients treated by physicians and those seen by health associates (P.A.s) or the combination of providers in spite of some confusion and negative attitudes toward the concept of new health practitioners expressed by the patient prior to his visit. It is possible that the health associates during the course of their visits were able to overcome the initial negativity of a fairly large group of patients.⁴

This might indicate that at least for some patients professional contact with the P.A. would likely increase acceptance.

The lack of complete acceptance among "other physicians in practice" and "community physicians" shown in Table 3 may be an entirely different matter. Fink⁵ in a study of medical and P.A. students found that medical students were threatened by P.A. students. "By the end of the first six months of a two-year P.A. training program the P.A. is able to do a history and physical exam as well as, if not better than, most fourth year medical students." Fink explains earlier in the article that this is due to poor teaching of these skills in most medical schools. "Their (the P.A.s) competence is a threat to the medical student who is less well prepared in these technical skills. Thus a situation of mistrust and hostility is fostered." It may be that a similar situation develops in some Oklahoma practice settings due simply to the economic advantages that the P.A. brings to

some physicians, perhaps at the expense of others.

The physician considering the addition of a P.A. to his practice is naturally interested in learning what responsibilities are normally delegated to the P.A. and how the P.A. will affect health care quality. Equally important to some physicians is knowing whether the P.A. will change the amount of time the physician spends in medical office, at the hospital, for leisure time, etc. It was necessary then in our survey to explore this aspect of the P.A. Our survey was designed to look at general rather than specific areas in which the P.A. might be utilized. It should be noted that more specific information might have been obtained if the physicians had been given the opportunity to answer a more open-ended question about their use of the P.A. The results of questions on utilization can be seen in Table 4.

TABLE 4

	Yes	No	Not Applicable
My P.A. works primarily in the office when I am present	77.4%	13.2%	9.4%
My P.A. sees emergency room cases without my being in the hospital	51%	39.6%	9.4%
My P.A. sees most of the unscheduled patients in the office	37.7%	41.5%	20.8%
My P.A. has built up his/her own patient population and sees them routinely on follow-up without consultation with me (except for initial visit)	26.4%	62.3%	11.3%
I see most OB/GYN patients myself	37.7%	15.1%	47.2%
My P.A. does most of the hospital admissions, histories and physicals	64.2%	28.3%	7.5%
My P.A. does most hospital discharge summaries	41.4%	49.1%	9.4%
Since the employment of the P.A. I feel the quality of health services has improved	84.9%	11.3%	3.8%

It appears that physicians find the P.A. especially useful in the office or the hospital, as this is where they most often indicated that their P.A. was being utilized. Two physicians surveyed noted that their P.A.s were providing new services to the community. One P.A. was operating a satellite clinic and the other P.A. was working full time in a venereal disease program conducting weekly clinics, special sessions at women's jail and juvenile detention, and working with nursing, medical, and osteopathic students.

Table 5 shows how the physician respondents' time allotments were changed as the result of the P.A.

The addition of a P.A. to a medical office can be instrumental in changing the time allotment

TABLE 5

Setting	Time Increased	Unchanged	Time Decreased	Not Applicable
Office	26.4%	39.6%	24.5%	9.5%
Hospital and emergency room	7.5%	30.2%	50.9%	11.3%
Nursing home, home visits	7.5%	43.4%	30.2%	18.9%
Personal time	62.3%	28.3%	3.8%	5.7%
Continuing medical education	52.8%	41.5%	—	5.7%

of the physician. From the survey data it can be inferred that by the use of a P.A., the physician can significantly increase his personal time, increase his time spent for continuing medical education, and/or decrease his time spent in the emergency room and at the hospital.

The physicians were also asked to evaluate their P.A.s for overall professional ability, professional deficiencies, and to list areas of continuing medical education that would be beneficial to the P.A.s. The physicians rated the P.A. on overall professional ability as follows: excellent 75.5%, good 20.7%, fair/acceptable 1.9%, and poor/significant deficiencies 1.9%. It can be inferred from the above data that a significant majority of the physicians were well satisfied with their P.A.'s professional abilities.

There were very few (seven) physicians who found any professional deficiencies in their P.A.s. Three of these stated that the P.A. lacked confidence in himself, or needed more experience, but felt that time was taking care of both problems. Two physicians felt that the P.A.s in their employment were lacking in business management abilities; but the authors question whether most physicians would expect their P.A. to act as a business manager rather than a medical care provider. Of the remaining two physicians, one stated that his P.A. is, "sometimes too firm and overbearing with instructions to patients," and the other physician stated that his P.A. "leaves some areas untouched while other areas are perfect."

Thirty-two physicians listed areas of continuing medical education that they felt should be available to P.A.s: General medical postgraduate courses were recommended by 25%; pharmacology by 19%; and pediatrics by 17%. P.A. continuing education in the areas of patient contact, family practice, and emergency medical care were each listed by 9% of the physicians. Other general areas were also listed but only by one or two physicians.

Having looked at P.A. location, acceptability, and utilization it seemed important to know some of the economic and productivity factors of

the P.A. in the medical office. One study estimated a 30-50% increase in the number of patients seen per day as the result of employing a P.A.⁶ Other studies have reported even higher increases.⁷⁻⁸ The authors were interested in learning how Oklahoma physicians felt their P.A.s had affected their productivity.

The physicians were asked to approximate the hours that they worked each week and the hours that their P.A. worked. The estimate for the physicians averaged 57.6 hours weekly and the estimate for the P.A.s averaged 45.5 hours weekly. It can be inferred then that the P.A. increased man hours available for patient care by 45.5 hours or 79% weekly.

The physicians were next asked to estimate their weekly number of patients and the number of patients seen weekly by the P.A.. Physicians saw 141.4 patients on the average per week while P.A.s saw 72.3 patients on the average per week. This means that if the P.A.s were seeing these patients with only a minimal amount of physician consultation that the P.A.

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was able to increase the patient load by an average of 51%.

The physicians were asked to approximate the monthly net billing received by the practice for P.A.-rendered patient care services. Only twenty-two of the fifty-three physicians filled in an amount, some stating that the question was not applicable to their practice or that they did not know the amount billed by the P.A. The range in monthly billing was rather large, \$380-7,000. A cross tabulation was run to see if the lower monthly billing rate was because these P.A.s were seeing fewer patients. No correlation between number of patients seen and amount billed monthly could be made. Thus, the authors concluded that the physicians must have based their estimates on different types of data to produce such a large range in billing amounts and that the information was not valid to determine an average monthly billing for Oklahoma P.A.s.

A larger number of physicians were able to estimate the yearly cost of the P.A. inclusive of salary, fringe benefits, insurance, and overhead. From the forty-one physicians that were able to fill in a monetary value for the P.A. yearly cost a range of \$3,000-\$25,000 was obtained. There obviously was some misunderstanding of this question. The extremes being so great the authors felt that an average of these figures would produce a misleading yearly P.A. cost, thus a mode range was determined from the given data. It was found that 44% of the physicians estimated that the P.A. yearly cost was between \$18,000-22,000. This mode range represented the majority of the estimates.

Since the economic data were believed the results of misunderstood questions, the original intention of subtracting the yearly P.A. cost from the P.A. net billing to determine P.A. revenue could not be done. So a standard fee for an office visit was obtained from the Medicare Claims Administration for the State of Oklahoma.⁹ This figure, \$7.70, was multiplied by the average number of patients seen weekly by the P.A. to obtain a weekly P.A. revenue:

$$\$7.70 \times 72.3 = \$556.71$$

This weekly revenue average was then multiplied by an expected 50 weeks worked yearly by the P.A.:

$$\$556.71 \times 50 = \$27,835.00 \text{ approximately}$$

The results show that the average Oklahoma P.A., based on the estimated figures of the

physicians, could increase patient revenues on the average of \$27,835 per year.

If the mode range that was found for the yearly P.A. cost is subtracted from the calculated P.A. yearly patient revenue then a yearly profit range for the P.A. can be determined:

\$27,835	\$27,835
-18,000	-22,000
<u>9,835</u>	<u>5,835</u>

It must be emphasized that this profit range of \$5,835-9,835 is based on estimates of patient load and costs, and an average Medicare reimbursement figure. By contrast, Hill and Greenwood, in a recent study of three rural Oklahoma practices employing P.A.s, found an average office visit fee of almost \$15.00.¹⁰ If this figure is applied to the patient load figures from the physicians survey, the average Oklahoma P.A. is worth more than \$30,000 in additional profit to his employing physician. While they are indeed gross estimates, these figures are not too disparate from the \$20,000 net savings per P.A. estimated at the Kaiser Health Plan in Portland, Oregon.¹¹ The data, which produced the Kaiser estimate were collected in 1974, almost three years before our survey of Oklahoma physicians employing P.A.s and therefore, must be adjusted for economic inflation.

In summary, Oklahoma physicians who employ P.A.s perceive them to be a decided benefit, both in economic and social terms, and apparently use their services in a way appropriate to their training: as an assistant to the doctor. The physician who may be considering the addition of a P.A. to his staff, however, should evaluate the survey data reported here in light of the specifics of his own practice: number of patients seen, the desire to reallocate

time, the ability to re-organize the practice to accommodate another practitioner, and to spend time supervising his work.

Our survey also suggests that the acceptance of the P.A. by patients, hospital personnel and other physicians may be a continuing area of some concern. It may be that a new practitioner who joins the solo, rural practice of an older, well-established physician, as was the case for most of the P.A.s reported in our survey, will always be accepted "with reservation." Time may solve the problem. Future studies will be needed to resolve this issue. □

ACKNOWLEDGEMENT

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Salicylate-Induced Hepatotoxicity: A Review

CHARLES E. BRYANT, MD

Unexplained elevation of serum transaminase values (SGOT or SGPT), occasionally a diagnostic dilemma, may be due to treatment with therapeutic dosages of aspirin or other salicylates.

INTRODUCTION

Although correlations between salicylate therapy and elevated liver enzymes were first reported in 1956, this effect of treatment with salicylates has not received as much attention from the practitioner as other side effects. Several articles on the subject of salicylate-induced hepatotoxicity have appeared in the literature in recent years.

CLINICAL OBSERVATIONS

In 1956, Manso, Taranta, and Nydick¹ reported studying 23 children with rheumatic fever for elevations of transaminase values associated with aspirin therapy. All had normal enzyme levels prior to the administration of

aspirin. Aspirin or sodium salicylate was administered in a daily dose of 0.6 g/15 lb body weight until symptoms and signs of toxicity appeared. Of fourteen patients in whom SGOT levels alone were studied, seven had values above 50 u/l (normal, less than 40 u/l), the maximal rise being to 146 u/l. In the nine remaining patients, both SGPT and SGOT levels were followed. Six of the nine patients had elevations of both enzymes. Enzyme levels in all twenty-three patients returned to normal after salicylates were discontinued.

Drivsholm and Madsen² studied the effects of salicylate therapy on liver enzyme levels in nine patients: four had been admitted for treatment of different uncomplicated fractures, and five had been admitted to the hospital with "lumbago." The patients were treated with sodium salicylate at doses of three to six grams daily, for an average period of three weeks. Three patients developed small elevations of SGOT.

Little attention was given to these observations until 1971, when Russell, Sturge, and Smith³ reported elevated transaminase levels after aspirin therapy in eight of thirty-two children, ages two to fifteen, with juvenile rheumatoid arthritis (JRA), and one with dermatomyositis. All but one of the children with elevated transaminase levels (maximum SGOT-840; SGPT-2000) had blood salicylate levels of greater than 35 mg%. Two of the nine

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children affected also had elevation of alkaline phosphatase levels. Transaminase levels in all patients fell to normal, usually within one week, when salicylates were discontinued. Of eighteen adults with rheumatoid arthritis (RA) included in this study, only one had elevated transaminase values.

Iancu⁴ reported similar elevations of hepatic enzymes in fourteen patients with rheumatic fever and three patients with juvenile rheumatoid arthritis (JRA). All had normal enzyme levels prior to receiving aspirin. Elevation of transaminase values occurred in ten of the rheumatic fever group and in two of the three JRA patients. The earliest increase was noted ten days after initiation of treatment, usually occurring two to three weeks after starting aspirin. High transaminase levels were found to continue as long as high levels of salicylates were maintained. All transaminase values returned to normal within three to five days after stopping treatment or reducing aspirin dosage. Two patients developed hepatomegaly, and two had elevated alkaline phosphatase levels.

Rich and Johnson⁵ treated six patients with JRA with salicylates (acetyl-choline or sodium salicylate) in dosages sufficient to raise serum levels to more than 25 mg%. All developed elevations of SGOT and SGPT. In addition, four developed elevated lactic dehydrogenase (LDH), four had increased alkaline phosphatase, one had increased BSP retention, one had increased serum bilirubin and two had bilirubinuria. Four patients developed symptomatic complaints typical of clinical hepatitis. In addition, all six developed peripheral eosinophilia during salicylate therapy. Maximal liver dysfunction correlated well with serum salicylate peaks in this study.

Athreya, Moser and Myers⁶ reported aspirin hepatotoxicity in thirty-four patients with JRA followed for periods of up to twenty-seven months. The average serum salicylate level in this group was 23.3 mg% (range 9.0-54.0 mg%). Twenty-two of the patients developed abnormalities in one or more of the liver function tests. All twenty-two of these patients developed elevations of SGOT, fourteen had elevated SGPT levels, four had elevations of LDH (usually preceding other enzyme elevations by seven-to-ten days), and nine had elevated alkaline phosphatase levels. Three patients had marked elevations of all enzymes tested plus prolongation of prothrombin time with epistaxis requiring hospitalization. All lab studies

in these three patients returned to normal after withdrawal of aspirin. Nineteen patients in this study had moderate elevations of one or more enzymes without prolongation of prothrombin time. Liver functions returned to normal in six of these patients when therapy was discontinued, and twelve showed fluctuating enzyme levels on continued therapy.

Miller and Weissman⁷ studied correlations between elevated transaminase values and serum salicylate therapy (acetyl-, choline, and sodium), in eighty-eight patients with JRA. Mean and standard deviations of serum salicylate levels were 21 ± 11 mg%. Fifty-nine per cent had elevations of SGOT and 41% had elevated SGPT levels at some point during the study period. All patients with elevated SGPT levels also had elevations of SGOT, the latter usually being slightly higher. Elevations of transaminase values greater than 100 IU/l occurred in 11% of patients on one or two occasions. Only one patient had symptoms of nausea and vomiting. Correlation between serum salicylate level and transaminase value was inconsistent in individual patients. It was also not possible to distinguish statistical differences between the effects in patients with systemic JRA and the localized pauciarticular form nor in those with active versus inactive disease.

Bernstein et al⁸ also studied aspirin-induced hepatotoxicity in patients with JRA. SGOT and SGPT levels were analyzed in 102 JRA patients receiving aspirin therapy. Sixty (59%) were found to have at least one elevated SGOT level during the study, with values ranging from 40 to 2675 IU/l. Elevated SGOT values were found to occur more often in children under 11 and in children with systemic disease; however, these children also received higher mean aspirin doses than the older children and children with poly-articular and pauciarticular disease. Liver biopsy findings in three patients with SGOT values greater than 500 IU/l included mononuclear cell infiltrates in periportal areas, and ballooning of hepatocytes with associated increased amounts of fat and glycogen. Elevated SGOT values correlated with high aspirin doses and serum levels. Elevations of SGPT were present 69% of the time when serum salicylate values were more than 25 mg%, but

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only 48% of the time when the serum value was less than 15 mg%. Clinical improvement in the course of the disease was found to occur in thirteen patients in whom SGOT values were greater than 100 IU/l. (This may have been related to higher serum salicylate levels in these patients.)

Seaman, Ishak, and Plotz⁹ were the first to report aspirin-induced hepatotoxicity in patients with systemic lupus erythematosus (SLE). Three young women with SLE were included in this study. All three had transaminase elevations associated with administration of aspirin, which returned to normal in each case when aspirin was discontinued.

In a later study, Seaman and Plotz¹⁰ included twenty patients with active rheumatoid arthritis and sixteen patients with SLE. All received aspirin at 50 mg/kg body weight/day, and the dosage was increased by 640 mg every other day until a morning salicylate level of 25-30 mg% was achieved. Dosage was then adjusted to maintain this level for two weeks. Of the patients with rheumatoid arthritis four developed abnormal transaminase levels without abnormalities in other liver tests. One of these patients, a fifty-five-year old man, developed anorexia, vomiting, loss of taste for cigarettes, and a tender liver associated with high salicylate levels. Of the sixteen patients with SLE, seven developed increased transaminase levels and one also had a slight increase in alkaline phosphatase levels. Three developed anorexia and nausea and one of those lost the taste for cigarettes at the time of his abnormal transaminase values. Abnormal liver functions tended to occur more rapidly in SLE patients as compared to those with rheumatoid arthritis. Abnormal liver tests returned to normal in all patients when aspirin was discontinued.

Salicylate-induced hepatic injury has also been reported in numerous other cases.¹¹⁻²⁴

PATHOLOGY

Abnormal liver biopsy findings associated with salicylate hepatotoxicity have been reported by several authors.^{5, 8, 9, 11-19} The first evidence of light microscopic changes in humans was reported in 1973 by Rich and Johnson.⁵ Liver biopsy in one patient showed single-cell parenchymal necrosis and infiltra-

tion of portal triads with mononuclear inflammatory cells and mast cells. Biopsy in another patient revealed only minimal portal infiltration with mononuclear cells, without evidence of parenchymal disease (healing may have occurred prior to biopsy in this patient). Other reported findings have varied from "mild fatty infiltration"¹⁸ to changes including lobular disarray, focal hepatic dropout and degeneration, frequent mitoses and binucleated cells, occasional councilman-like bodies, and a focal mononuclear infiltrate.¹⁸

Liver biopsy performed on two of the patients reported by Seaman, Ishak and Plotz⁹ revealed significant abnormalities in both patients during the period of aspirin administration. When biopsies were reported several months after stopping aspirin administration, findings had returned to normal in each patient.^{20, 21}

Iancu and Elian¹¹ were the first to report electron microscopic changes in a patient with aspirin hepatotoxicity, a nine-year-old boy with RF. A liver biopsy was performed after treatment with aspirin, when the serum salicylate level was 21 mg%, SGOT 220 IU/l, and SGPT 240 IU/l. Light microscopy showed widened sinusoidal spaces, slight periportal lymphocytic infiltrate, cytoplasmic vacuolization, and an increase in binucleated hepatocytes. Electron microscopy showed extensive abnormalities, including: shrunken nuclei, dilated nuclear envelopes, clumping of chromatin, dilatation of the rough endoplasmic reticulum, loss of ribosomes, proliferation of the smooth endoplasmic reticulum, increased numbers of autophagic vacuoles, and mitochondrial abnormalities.

NORMAL VOLUNTEERS

Seaman and Plotz¹⁰ also included three healthy young men in their study. No enzyme abnormalities were noted in these volunteers with administration of salicylates, except for a slight increase in SGPT level in one volunteer who was also taking 0.3 mg of L-thyroxine daily (serum salicylate levels 25-30 mg% for two weeks). The value reverted to normal when aspirin was stopped.

Furst et al,²⁵ studied the effects of aspirin therapy on serum levels of SGOT, SGPT, AP, and CPK in twenty-eight normal volunteers (17 M, 11 F, mean age 20.4 years). Each volunteer was given 40 mg/kg body weight of sodium salicylate intravenously over two to three min-

utes. Three to six weeks later each subject was given buffered aspirin (AscriptinTM), 65 mg/kg body weight/24 hours, for seventy-two hours. No significant elevations of any of the above enzymes was found by the authors, except for an elevated AP in one eighteen-year-old male, and abnormal CPK's (70 and 297 IU/l) in two other subjects.

ANIMAL STUDIES

Janota et al²⁶ in 1960 were the first to demonstrate salicylate-induced hepatotoxicity in animals. Eight adult rabbits received either five grains of soluble aspirin B.P. or as 1 g/ml aqueous solution of sodium salicylate in three divided doses daily for two weeks. Each then received 0.75, 1.0, or 1.5 mg of aspirin or sodium salicylate per gm body weight daily for successive two-week periods. Elevations of SGOT, SGPT, LDH, isocitric dehydrogenase, and aldolase occurred in six of the eight rabbits studied. Elevations of enzymes occurred only with serum salicylate levels of greater than 30 mg%, and appeared from thirteen to thirty-three days after initiation of therapy. Tissue studies in two of the affected rabbits revealed cloudy swelling and fatty infiltration in the liver; other tissues in these rabbits and all tissues in the remaining six rabbits were normal. Similar findings were reported by Kalczak et al²⁷ in 1970.

SUMMARY

Salicylate-induced hepatic injury does exist as a clinical entity; liver abnormalities have repeatedly been shown to occur in patients with no previous history of hepatic disease. The hepatic injury is usually mild; however, the clinical spectrum is wide, varying from mild elevations of hepatic enzymes to a clinical picture of symptomatology, hepatomegaly, bilirubin elevation, and marked biopsy changes all mimicking viral hepatitis. The severity of hepatic injury is generally directly correlated to the dosage of salicylates; however, individual susceptibility also varies widely, with severe hepatic injury occurring in some patients with low serum salicylate levels, and only slight or no injury occurring in some patients with very high serum levels. Liver abnormalities usually occur approximately two weeks after initiation of therapy, but may occur sooner or much later. The abnormalities are usually reversible when

salicylates are withheld, generally within one week. Although short-term studies in normal individuals have not shown as marked abnormalities as in patients with connective tissue disorders, long-term studies (at least two weeks of high-dose therapy) are lacking. Salicylate-induced hepatotoxicity should be considered in the differential diagnosis in any patient with altered hepatic function who has received salicylates for prolonged periods of time. □

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Hypercalcemia Corrected By Orchiectomy In a Patient With Carcinoma of the Prostate

CASE REPORT

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MICHAEL L. SOPER, MD

A case is reported in which marked hypercalcemia is found in association with carcinoma of the prostate and a dramatic fall in serum calcium level following orchiectomy.

The exact metabolic cause of the hypercalcemia and its subsequent improvement is not known.

Hypercalcemia has long been recognized as a manifestation of malignant disease. Malignant processes generally associated with hypercalcemia include multiple myeloma, carcinoma of the breast, carcinoma of the lung and renal cell carcinoma.¹ Prostatic carcinoma frequently metastasizes to the bone, however is seldom associated with hypercalcemia.¹⁻⁴ It has been postulated that hypocalcemia is a more frequent manifestation of metastatic prostate carcinoma than hypercalcemia.⁵ The case reported is an example of hypercalcemia associated with prostatic carcinoma with bony involvement. Of special interest is the fact the hypercalcemia responded dramatically to orchiectomy.

A 73-year-old white male was admitted to Hillcrest Medical Center in October of 1976, for evaluation of the symptoms of anorexia, back and pelvic pain and urinary frequency. He had lost approximately 20 pounds over a six-month period prior to admission. He stated that he had been nauseated but denied vomiting. He also stated that he experienced a change in bowel habits. Whereas previously he had always had one to two bowel movements daily, during the month prior to admission he reported constipation requiring the use of laxatives.

Physical findings were significant only in that the rectal examination revealed a prostate that was indurated throughout, approximately 2½ times normal size.

Laboratory data on admission revealed a calcium of 13.5 mg%, the upper limits of normal being 10.6 mg% in this laboratory. LDH was 340 µIU/ml. Serum creatinine was 1.8 mg%. Uric acid was 10.7 mg%. Urinary calcium excretion was 538 mg/24 hours. Urinary phosphorus excretion was 900 mg/24 hours. Calculated tubular reabsorption of phosphate was 54%. Bone marrow acid phosphatase was 26. Urinalysis was negative for Bence-Jones proteins. Serum protein electrophoresis was within normal limits. Hemoglobin was 10.8 gm%, hematocrit was 31%. Technetium pyrophos-

phate bone scan results suggested metastatic involvement in the bones of the pelvis. Bone marrow biopsy revealed metastatic carcinoma consistent with origin of genitourinary tract. The biopsy of the prostate revealed well-differentiated adenocarcinoma.

When the biopsy results were available, the patient was given Stilbestrol, one mg tid. One week following the institution of Stilbestrol therapy, there had been no improvement in symptoms. Serum calcium remained at 13.6 mg%. At this time, the patient underwent bilateral orchiectomy. Within 24 hours, he noted dramatic improvement in back and pelvic pain. Twenty-four hours following surgery, his serum calcium was 8.7 mg%, alkaline phosphatase had increased from 210 μ IU/ml to 325 μ IU/ml. Prior to surgery a serum parathyroid hormone level was obtained and was found to be 197 pg/ml (163-347). Following orchiectomy, at a time when the serum calcium was 7.9 mg%, the serum parathyroid hormone level was determined to be 260 pg/ml. This appeared to demon-

strate a normal response of the parathyroid gland to a falling calcium level.

DISCUSSION

Various mechanisms have been postulated for the hypercalcemia associated with carcinoma. These include bone destruction secondary to metastatic involvement,¹⁻⁴ tumor production of a parathyroid hormone-like substance⁶ and altered absorption or excretion of calcium. Laboratory results obtained on this patient seemed to exclude the likelihood of an ectopic source of parathyroid hormone, unless this substance were to be unmeasurable by the usual immunoassay techniques for parathyroid hormone. The relationship of the other two postulated mechanisms for the hypercalcemia in this patient cannot be clearly delineated. The fact that the hypercalcemia responded so dramatically to orchiectomy suggests the relationship between the hypercalcemia and a hormonally mediated aspect of tumor growth. The exact mechanism of this effect would appear to warrant further investigation. \square

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News From The Oklahoma State Department of Health

Veterinary Public Health Notes

HUMAN PSITTACOSIS on the East Coast — New Jersey regional pet store quarantined! Who is concerned? Emphatically — WE ARE. The disease was traced back to Oklahoma parakeets.

At the moment, the source of virtually all reported human psittacosis in the United States goes undetected except to the state from which the bird was obtained. In states where banding of birds is mandatory, it is possible to trace them back to the aviary where they were grown. In Oklahoma, where we are attempting to establish a banding program, a multi-million dollar industry is in peril of being shut down.

With an increased number of human psittacosis cases in the United States and a greater

preponderance of cases originating from Oklahoma, the Federal and State Agricultural Departments, along with the Department of Veterinary Public Health at the State Health Department might be forced to quarantine aviaries. With no banding, tracing becomes impossible and the conscientious grower will suffer along with the ones practicing poor aviary husbandry.

ENTEROBIUS VERMICULARIS, the common Seat, Pin or Thread worm is still being touted as coming from pets. Not so, except in the aberrant case where egg goes from human to hand to dog's fur and back to another human — a rare case indeed.

DERMATOMYCOSIS — How many physicians treat a skin problem with an obvious equine origin and never mention rabies? Probably none, as there is no connection.

Help spread the word. Tell your patients to vaccinate their animals for rabies. The old ounce of prevention-pound of cure may save a high-priced horse and obviate expensive, painful treatment for a saddened owner. Horses are just as susceptible as other animals. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR APRIL, 1978

DISEASE	April 1978	April 1977	March 1978	Total To Date	
				1978	1977
Amebiasis	5	2	4	13	7
Brucellosis	—	—	—	1	—
Chickenpox	—	218	—	—	779
Encephalitis, Infectious	4	—	1	5	5
Gonorrhea (Use Form ODH-228)	946	1014	1168	4016	4083
Hepatitis, A, B, Unspecified	92	97	93	280	293
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	5	3	3	14	5
Meningitis, Aseptic	7	—	3	17	10
Mumps	—	80	—	—	369
Rabies in Animals	32	38	10	79	128
Rheumatic Fever	—	—	—	—	1
Rocky Mountain Spotted Fever	—	9	—	2	12
Rubella	6	6	—	9	23
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	1	7	4	9	46
Salmonellosis	18	12	3	54	23
Shigellosis	55	7	6	86	14
Syphilis, Infectious (Use Form ODH-228)	9	6	7	39	27
Tetanus	1	—	—	1	—
Tuberculosis, New Active	28	29	37	125	112
Tularemia	—	1	—	—	1
Typhoid Fever	—	—	—	—	—
Whooping Cough	1	—	2	6	2

Address By
The Honorable David L. Boren
Governor, State of Oklahoma

Sheraton-Century Hotel Ballroom
May 4, 1978

Editor's Note:

One of the major speakers during Oklahoma Medical Summit '78 was Oklahoma Governor and senatorial candidate, David L. Boren. Governor Boren addressed the Summit Luncheon held Thursday, May 4th, and pinpointed some of the medical issues he has faced during his administration as governor. The following is the text of the Governor's address.



Governor David L. Boren

I want to commend you for all you are contributing to the quality of life in the State of Oklahoma. One project in particular which has been "near and dear" to me is, of course, the reform of our workers compensation system, which, of course, encroaches into many areas of medical concern. All of you, I think, know from firsthand experience the way in which that system operated (or failed to operate) for so many years. I said we had one of the "eight wonders of the world," really, in Oklahoma, with our workers compensation system. We had people who had declared to be 320% disabled and were still holding down a job and doing it very well in our state. Some ten years ago, your association began to assist in the area of reform for the workers compensation system. As you know, this past year, we finally enacted a new definition which survived four attempts to over-ride my vetoes. It is the first time it has ever been tried twice in the same

house — twice in the House and twice in the Senate — we survived by one vote. That "impairment" definition survived into law this year, and it was necessary, of course, then to have a task force to work out an impairment rating system for going into the workers compensation system.

Now I am very appreciative to the members of this association for the fine work which you contributed in this area. The recommendations have now been made and adopted by the Court, and it shows that perseverance pays off. I know

that your director, Dave Bickham, started to work in this area and was a member of a committee ten years ago. Just out of interest, I pulled out the recommendations of that committee from ten years ago and they are almost exactly the same as those that were finally adopted this year. So perseverance does pay off, and I am very, very appreciative of all of you who worked on this and those of you who have encouraged the efforts of the task force in this area.

I want to talk just a little bit today about some of the issues that are facing us in the area of health care, particularly the national policies that affect health care in the country. As you all know, we are at a critical juncture. In many areas, not only in the health care field, but in many areas of our society, professional groups are under attack by those who suggest that more and more governmental regulation is needed and being demanded by the people. In all areas of our private economic system our government seems to be bent upon having people write rules and regulations to control these economic groups — people who have never had any part of the productive economic process themselves. So the problem that you face and the challenge that you face now is not unique to medicine — it is happening to every other professional and occupational group in the country. It is particularly critical where you are concerned, and I'm convinced that what happens over the next two or three years is going to chart the course for the development of medicine, is going to determine the way in which medicine will be practiced, and either control or maintain the way it is now for the next hundred years in our society. You are easy targets for those who want to be demigods. The cost of health care is, of course great. It is a significant factor for the average American citizen, and like in so many areas, no one likes to foot the bill, so it is very easy to play upon these feelings by our people to justify more regulations — very easy to develop a conspiracy theory. It is very easy to try to portray the profession as somehow "self-interested" above the public interest and therefore one that should be tightly under the grip of governmental control. That is exactly what is happening in our country. There are many who are taking advantage of these sentiments and are trying to "ride them into public office" on

the balance of those who don't fully understand the economics or the system we are dealing with. So we have a great struggle going on as to whether medicine will remain essentially private, essentially free, essentially personal, if it will be something under private control; and when regulations occur, they will be local regulations, drawn up cooperatively and worked together at the local, grass-roots level, or whether it will be a matter of central governmental control. This battle is being waged very vociferously by all sides at the current time, witness the fact that there are over forty bills on the subject of national health insurance alone now pending before the Congress. I would argue that if we look at the record, one choice is very clear . . . increasing government control of a tight nature, of a nature that does not leave room for flexibility, of a kind that would centralize decision-making power at the federal level, is certainly not what we need! I don't know what the answer is in all areas, but I think we can clearly say what the answer is not. Let's just look at the record. One thing we cannot begin to afford is some of the programs that are being suggested. \$100 billion is the price tag that is conservatively placed on the Kennedy Bill for national health insurance. Such a cost would absolutely drive the inflation rate in this country out of sight, and we are already facing a deficit of \$60-70 billion. It is obviously beyond the ability of the national economy to absorb. In addition, increasing governmental costs of that magnitude would have the effect of basically, I think, changing not only the form of medicine in this country but changing the basic economic system. When you consider that 43 cents out of every \$1 earned in this country is already going to the government at some level in the form of taxation, how far can we go, how much greater can that figure be without bringing about a total and complete change in our economic system. And once we have a change in our economic system, history has shown us that changes in the political system come not far behind. So we cannot begin to afford the kind of price tag that is placed on many of the programs that are being talked about, and they should be ruled out as a practical matter from the beginning because of their excessive costs. What has been the experience with government programs in other areas? We have had a conservative estimation that fraud in the

(Continued on Page 296)

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(Continued from Page 294)

Medicaid program alone amounts to at least \$2 billion a year.

What about costs? Is it likely to reduce costs if we increase the amount of governmental participation and governmental control. Studies have shown that, depending upon the type of admission, federal regulations alone in the cost of paperwork have added between \$2.50 and as high as \$10 for every hospital patient admitted just because of additional regulation and paperwork in the hospital admission process. Several years ago before the adoption of Medicare when we had a \$40 billion annual health services bill in this country, the government participated to the tune of controlling something like 25% of that \$40 billion price tag. That \$40 billion of course, has shot up to \$150 billion but along with it (and it is interesting to know), the federal share and the federal participation has increased from 25% up to 40%, and I would suggest that with the increasing cost level, it is not coincidental that tangential to it has been an increase in participation by the government in health programs. We know what happens when we try to have

regulations imposed upon us in terms of the quality of care for our people. All of you remember the battle we fought in 1975 on utilization review which threatened the small hospitals in this state when we were told that we would have to have a minimum of three doctors who were able to rate the kind of care that was given by the other doctors. Then, of course, many hospitals simply did not have sufficient numbers of doctors. We faced the possibility that 30% of the hospitals in our state could have been closed. This year again we saw an example of the fallibility of writing regulations at the national level and then trying to impose them on very different local situations. This proposal, which has now been turned around, would have required the limitation of the four beds per thousand, which again would have resulted in Oklahoma in the closing of hospitals in the Indian hospital services in ten rural counties in Oklahoma who are badly in need of such services and in the sparsely settled parts of our state where people would have had to go miles and miles to get to the hospitals.

And so, I think if we look at the record of increasing governmental intervention in the medical area and in the health services area, that record speaks for itself and it is a record



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that should cause us to very carefully consider before advocating any further governmental intervention or regulation of any kind in the health field. I feel very strongly that as we move in the area of cost containment, for example, we should follow the Rostenkowski "voluntary approach" rather than the approach which has been projected by the administration. I feel very strongly that we should continue to use our own approaches at the local level (And by the way, the Oklahoma Utilization Review approach has worked very well; we estimate that it has saved some \$20 million in the first six months of operation. Again, I want to commend you for that effort.) These are the kinds of approaches we need and anything that we do in the area of national health insurance needs to be, first of all, voluntary; it needs to be phased in; it needs to be regulated at the local and not at the federal level; and it needs to be under private administration.

We want to have another social security system in this country. I think we can well imagine what it would be like to have governmental administration of a national health insurance program, and personally, I am not interested in seeing us establish another massive failure by the administration like the social security system in this country.

And so I think there are other solutions. But in talking about voluntary effort — in talking about effort at the local level — in talking about professional self-evaluation, we are at the point in this country where these cannot be merely taken as slogans. These can't just be taken as slogans that we all nod our heads to and say, "Yes, that's right." We have to do it ourselves. We have to improve management techniques, for example, in our hospitals and clinics to the maximum extent possible. We have to reduce the rate of inflation and the cost of medical care. We can't simply sit back and say, "That's right, we agree with those principles." It is going to take the active involvement of each and every one of you, and I urge you, not only for the sake of your profession, but for the sake of all of those that you treat. (I would say that I had two years of experience; with the medical system in England. I am happy to say that I survived it — that is just about all that I can say about it.) For the sake of all of us in this country, take this matter seriously because this might be an opportunity to do it yourselves that will not come again; and as you do make progress as you have made through

your own studies and the utilization review effort, for example, not only do the job yourselves, but tell the people that you are getting the job done, because this is vitally important that the people in our state and the people in our country know that you are motivated and that you are giving direction in ways that the government never could do effectively. It is essential to adopt the methods of treatment that are most effective and yet most cost effective, and to urge your patients to agree to accept those forms of treatment that are most cost-effective. The eyes of the country are upon you — and as I said, worse than that, the eyes of the demigods are upon you, waiting for you to fail to meet this responsibility. And so, it is going to take great vigilance on your part to meet this challenge and to make voluntarism and professional leadership in the private field work. If you fail and if those who want to increase governmental controls and governmental expenditures beyond reasonable levels have their way, you are not only going to do great damage to the medical profession, but we are going to see great damage to our entire economic and political system as well. And so, I would urge you to keep trying and I congratulate you for all that you have already done. I am very pleased with the things that have happened in the State of Oklahoma. I am very pleased that we have been moving in innovative ways and we have been doing it with your leadership. Instead of using highway safety money to put up signs, we now use that money to train emergency medical technicians and also to purchase ambulances on a matching basis for communities. Seventy communities now have new fully-equipped ambulances on this matching share program. Two thousand emergency medical technicians have been trained in the state. You know how many salaries were paid to train those two thousand? Three salaries were paid partially in order just to get the materials out and to pay some of the travel expenses, and that's all. The rest of that training was done voluntarily by the members of the medical profession in the State of Oklahoma, and I appreciate that and I think you can be proud of that, also.

This demonstrates the spirit which we have here, and it demonstrates the way problems ought to be solved. We ought to be solving them ourselves, we can solve them ourselves, and we can do so without having the whole thing directed by the federal government in

Washington. We doubled the number of residency positions in the State of Oklahoma in the past three years, and I am very proud of that, so that our students graduating from medical school now have the choice; they don't have to leave the State of Oklahoma to find a residency position. We have increased our retention rate of medical school graduates who stay and practice in the State of Oklahoma, which was very low five years ago (about one in three). We are now retaining more than one out of every two, and that retention rate continues to go up. We have tried to do some things that are innovative. Our Physician Manpower Commission — some of you work with it — has really made a great impact right now. One hundred doctors have been brought into this program in the past three years and are now either on rural scholarships, community matching grants or in communities under 7,500.

Again, I think this is something that we can be proud of in helping the distribution of physicians in the areas where they are so vitally needed.

You have helped, and through your urging, we have been able to get approved the first two of our family practice clinics outside of metropolitan areas, and again, this is very important in having this kind of training in satellite hospitals across the country. Oklahoma is one of the very first states in the country to take this innovative approach, so that we can begin to train medical personnel not only in the state where we want to keep them, but also in the geographic areas of our state where they are most needed. This is an innovative program; it is a good program that is bearing fruit.

Many other things have been done in our state in areas related to medicine this year, I was very pleased that the legislature approved our program to continue the cervical cancer testing program. We have now tested over 250,000 women in the State of Oklahoma through this program (and by the way, 1,000 cases of cervical cancer were detected early as a result of these tests; 12,000 other serious health problems were detected that otherwise would have gone undetected) and the legislature this year appropriated almost \$400 thousand to pick this up as a "state program" that we want to continue with state administration. We are getting a new awareness, I think, of the importance of health service at

the local and state level. I am very pleased that, for the first time, we have had a person working full time as a liaison to the medical community, and I think that is important. The importance is also being demonstrated in the area of appropriations, and this is something that might not be known. In terms of per capita expenditures on health as a percentage of total state budget, the State of Oklahoma now ranks third among all of the states in the nation in terms of per capita health expenditures as a percentage of state budget.

I think this indicates that we are trying to do our part and we are trying to demonstrate that, if you give the private sector a chance and give state and local government a chance, I think we can solve our problems and deal constructively with them ourselves without the federal government moving in. I am proud that not only is this happening in the area of medicine, but we are trying to be innovative in so many other ways, and I am very impatient with people who take the attitude that the State of Oklahoma needs to lag behind and we need to wait and model ourselves after others. When you look at the figures, do you realize that you are not living in a state that is falling behind. You are living in a state that, of all the sunbelt states, is now second in growth of population, growing at the rate of 11% at the current time — three times the national average population growth. You are living in a state that is developing economically at a pace matched by only four other states in this country — this past year \$730 million of new outside investment in our state and 54,000 new non-farm jobs, topping again every state in the sunbelt with the exception of Florida. You are living in a state that is moving forward, that is developing. According to national figures, Oklahoma ranks in the top three in the number of years of education or skill training per capita of our citizens. Not only are we progressing economically, but we are living in a state where people are well-trained, well-educated, and well-informed, and in the top three of all of the states in the nation. You are living in a state that in twenty short years has moved from being in the bottom ten in per capita income to now ranking ninth in per capita spendable income of all of the states in the country. Oklahoma is now in the top ten, and that's partly because we rank at the bottom in another area — we rank in the bottom four in the per capita

(Continued on Page 300)

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1. Based on clinical studies. Data on file, American Can Co.

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total tax burden of our people. It is interesting, we passed New York City this year. Their citizens per capita have a higher gross income than we have; our citizens, after taxes, now have a higher per capita spendable income than the citizens in New York City.

So we are in a state that is moving forward, and we shouldn't sit back and take a back seat to anyone. When we talk about when are we at the grass roots level going to take the lead in medicine, when are we going to develop programs to say to the nation, "Look, we can do it ourselves!", we ought to be the people to do it. We are as well equipped as any people in this country to show the right direction and we are trying to innovate in so many ways. Some of new programs that we have started in the State of Oklahoma are pilot programs for gifted and talented children in our schools that were started last year for the first time; the state funded elementary counseling program; expansion of our child guidance services from twenty-seven counties to a statewide program this year; the beginning of a new program to put the unemployed to work (we built thirty-six miles of nature trails to protect the natural heritage of our state this year); and an innovative new program for restitution. We are one of three states that has an effective program for the restitution back to the victims of crime. It doesn't get into the papers very often, but this month eleven hundred first offenders who have been convicted of crimes in Oklahoma, instead of being put in prison at a cost of \$7,000 a year to you, will be able to make restitution under court order and they will be paying back the victims some \$30,000 this month. We now have one of the three largest victim restitution programs in the United States.

This is an innovative approach that works. You are going to be saved \$4 million this year because of a new inmate labor program within the corrections department where the inmates themselves are going to do some of the work that we previously contracted out. Thirty-six months ago, we had 97,000 people who were young and able-bodied drawing welfare in Oklahoma; today we have 86,000. That's 11,000 reduction (about 12%). These are the kinds of things that we can be proud of. We can be proud of the fact that we are solvent. We can be proud of the fact that government can operate within bounds. We have paid off \$33 mil-

ion worth of bonds early. We have reduced the income tax and inheritance tax rate by about \$20 million a year. We have increased our cash reserve account (our savings account). I got a little bit of criticism for using \$8,000,000 for "pothole" repair. I noticed we were saving it for a rainy day, and I thought a snowy, icy day also qualified. Four years ago we had \$10,000,000 in our reserve account, and this year we will end the year with \$82,000,000 and what other state do you know that had a reserve account — any reserve account, or even a balanced budget — that they could turn to in the case of an emergency.

So I think we have been setting the kind of example that we can be proud of. *You* have set the kind of example in your profession and in contributing to your state that I appreciate very much. For those who say, "You can't do it at the local level; the people are not responsible enough to do it themselves; the profession's too self-interested to do it for itself," I think we must continue to give them an answer that that's not true. We still care enough about our communities, we still care enough about our system of government that we intend to make this system work, and we don't need to be overshadowed by a set of rules and regulations that saps our own creativity and our own ability to serve our fellow man. Sometimes I'm sure all of us begin to wonder if it's worth it . . . this fight that I'm talking about, this example that we are trying to set and all of the effort that is involved in it. Sometimes you meet yourself coming and going from planning sessions and task force meetings and meetings to help support the local bond issue or meetings that circulate some kind of petition or meetings to educate the public on some subject. I heard an answer the other day that really made me think about it all over again, and I was glad I had the experience. There was a man who came to my office who many of you would recognize. His name is Jesse Owens, and you may recall he was the great black American athlete who participated in the 1936 Olympic games in Germany when Hitler was in power. He was in Oklahoma promoting the sale of medals to help finance the American Olympic teams this year and was holding a press conference in the chambers in my office. He was the first American to ever win four gold medals — an inspiring person — and after we had been visiting, one of the radio reporters asked him a ques-

(Continued on Page 301)

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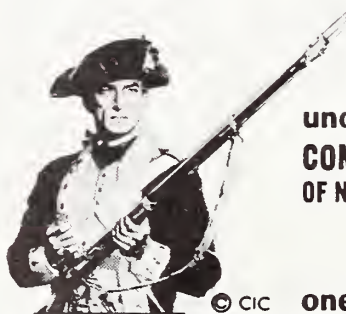
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tion. He said, "You are long ago retired. Why are you out here promoting the Olympics again? Your day is passed." He said, "Well, I'll tell you. I believe in the Olympics and I'm very proud of the fact that our government doesn't support it, but our people support it. It's a private effort. I believe in the Olympics as a place where you can have more international understanding, but above all, I want to raise money for our team because it represents our country. It may be old fashioned, but with all of the people who are criticizing our system, I deeply believe in it and it is worth every bit of time I have and every bit of influence I have to try to preserve it and to try to promote it." And he said, "You know, you can knock it, but there has never been a time in the history of the world in which the individual human being has been given so much opportunity to achieve everything that he or she potentially could achieve as in our system. It is not perfect, but there has never been a place in which people have been given more individual opportunity." He said, "I'm not talking about hand-outs, I'm not talking about people getting something for nothing. Olympic stars didn't get where they are and I didn't win those gold medals by someone giving them to me. We know what individual initiative is and we know what self-discipline is. I am talking about a system that lets people who want to work, who want to achieve, who want to create; I'm talking about a system that gives them the greatest opportunity of any system the world has ever seen, to do that. You ask me if it is worth it for me to be involved in a small way in an effort like that? I'm going to be involved in that until I draw my last breath!" And he said, "That's the way I feel about it."

I think that's the way *we* feel about it and we are fighting and *you* are fighting to preserve a system that allows the *individual* to live up to his or her potential, to unlock that creative spirit that built this country. This country was not built through federal government appropriations or regulations and this country is not going to be preserved by it; it is going to be preserved by individuals *who care*, and *Oklahoma is full of them!* □

HEW to Initiate Second Opinion Program

Department of Health, Education and Wel-

fare has announced that it will spend over \$600,000 soon to promote surgical second opinions. The program will be pointed at all patients but will have Medicare and Medicaid patients particularly in mind.

According to latest plans, HEW will spend \$460,000 producing promotional leaflets, \$25,000 for TV and radio time and \$130,000 to develop a national, toll free "Hot Line."

In Oklahoma it appears that Aetna Medicare will handle most local calls, with the Oklahoma State Medical Association and county medical societies becoming involved only in the event that the attending physician cannot or will not suggest other physicians for second opinions. Of course, the Oklahoma State Medical Association and most county medical societies have provided this service for a number of years.

Several meetings between Dallas HEW officials, the OSMA, Aetna Medicare, the Department of Institutions, Social and Rehabilitative Services, etc. have been held to work out the details of the program. OSMA has agreed to cooperate but not to be an active partner in the project.

It appears now that Medicare will pay for the second opinions, but Medicaid will only pay if the second opinion consultation is one of the four allowable physician visits per month. □

Dean of Tulsa Medical School Resigns

James E. Lewis, PhD, dean of the University of Oklahoma Tulsa Medical College since March, 1977, has resigned that position, effective September 1, and will return to Washington, D.C. as the university's representative to federal health and biomedical research agencies. He came to Tulsa from the Institute of Medicine, National Academy of Sciences, where he was Deputy Director of Social Security Studies.

The change was approved during the personnel section of the OU Board of Regents special budget meeting in June.

Dr Bob Mitchell, an Oklahoma City physician who is president of the OU Regents, said, "I regret to announce that Dean Lewis has resigned his position in Tulsa. His leadership has brought the Tulsa Medical College to a level of development and maturity of which we are all proud. On behalf of the regents and the university, I want to express our appreciation for a job well done. Our best wishes go with him in his return to Washington."

Lewis was appointed interim dean in March of last year. The appointment became permanent in July, 1977.

During his tenure, TMC, which provides training for third and fourth year medical students and resident physicians, has expanded both those programs. He was instrumental in the development of family practice residency programs in Bartlesville and Muskogee and the Tulsa Community Internal Medicine Center which will open in July as a cooperative program of the college, St. John Medical Center, Hillcrest Medical Center and Saint Francis Hospital. □

Doctor Margo Named Vice-Chairman of Cost Containment Panel

OSMA President Dr Marvin K. Margo was elected vice-chairman of the Oklahoma Voluntary Cost Containment Panel at a recent meeting in Oklahoma City. The panel is made up of representatives from ten health groups, representatives from business and representatives from state government, and was organized in an effort to effectively deal with the problem of rising health care cost.

Thus far the Board has approved a provisional set of goals and objectives which are awaiting clearance by the Justice Department, and it has also begun work on a public relations program which will be conducted in conjunction with the voluntary cost containment effort. Each of Oklahoma's hospitals has been urged to join in this unique voluntary program, and a packet of information for use by hospitals is being developed.

The chairman of the panel is Richard Mooney, administrator of Oklahoma City's St. Anthony Hospital. □

DEATH

ALFRED M. EVANS, MD
1902-1978

Alfred M. Evans, MD, retired Perry general practitioner, died May 17, 1978. Born in Truckee, California, Dr Evans was graduated from the University of Oklahoma College of Medicine in 1930. His practice was established in Perry in 1931. He had served as an Oklahoma State Medical Association Trustee from District 11. He was the father of Gary G. Evans, MD, Muskogee. □

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Services for Oklahoma Poison Control Center Expanded

The Oklahoma Poison Control Center, formerly operated by the State Department of Health, has been transferred to Oklahoma Children's Memorial Hospital, Oklahoma City, and its services and staff expanded.

The new center is in operation 24 hours a day, seven days a week, with pharmacists on duty at all times to assist in the identification of poisonous products, plants and other toxic agents.

The center can be reached statewide without charge by dialing the toll free number 1-800-522-4611. Persons calling in the Oklahoma City area should dial 271-5454. □

Medicare Opens Toll-Free Telephone Lines

Officials of the Oklahoma City Medicare Claims Office have announced that a new toll-free telephone service is now available. Toll-free calls can be placed anywhere outside Oklahoma City by dialing 1-800-552-9079. Oklahoma City physicians should dial 848-7711.

The toll-free service went into operation June 1.

Medicare officials explained that the toll-free number should be used to ask specific questions about Medicare Part B claims and that in many cases immediate answers can be given. The toll-free number, officials say, should not be used to ask general Medicare information. □

Drug Center to Open Analysis Laboratory

The University of Oklahoma Health Sciences Center is opening a Drug Analysis Laboratory July 17, 1978, to provide drug analysis services to physicians throughout Oklahoma. One-day service will be offered on all samples with emergency service available 24 hours daily. For information, call Dr Loyd Allen at 405-271-6471. □

DIALYSIS CENTERS IDENTIFIED

The following is a list of Dialysis Centers in Oklahoma as identified by the Kidney Foundation of Oklahoma. The primary contact person for each of the following institutions is identified.

DIALYSIS

Annette Waters, RN
Baptist Medical Center of Oklahoma
3300 Northwest Expressway
Oklahoma City, Ok. 73112

Gary Hays, MD
Betty Lowry, RN
Clinton Regional Hospital
100 North 30th, Box 218
Clinton, Ok. 73601

L. O. Laughlin, MD
Greater Oklahoma Dialysis
4312 North Classen
Oklahoma City, Ok. 73118

T. R. Medlock, MD
James K. Tanner, Adm. Dir.
Hillcrest Medical Center
Renal Department
1120 South Utica
Tulsa, Ok. 74104

Elizabeth Adams, RN
Connie Davis, RN
McAlester General Hospital
P. O. Box 669
McAlester, Ok. 74501

Sister Donald Mary
Mercy Health Center
4300 West Memorial Road
Oklahoma City, Ok. 73120

Kenneth E. Calabrese, DO
Oklahoma Osteopathic Hospital
9th & Jackson
Tulsa, Ok. 74127

Eugene L. Copenhaver, Mgr.
Oklahoma Veterans Center
Box 200
Sulphur, Ok. 73086

Charles Kellner, RN

Presbyterian Hospital
Northeast 13th at Lincoln Blvd.
Oklahoma City, Ok. 73104

Melvin L. Brill, MD
Stella Bowen, RN
Saint Francis Hospital
6161 South Yale Avenue
Tulsa, Ok. 74136

K. E. Whinery, MD
Sayre Hospital
501 East Washington
Sayre, Ok. 73662

Janet Henderson, RN
St. Anthony Hospital
1000 North Lee
Oklahoma City, Ok. 73102

John A. Rizzo, Adm.
St. Joseph Medical Center of Ponca City
Box 1270
Ponca City, Ok. 74601

Jack W. Shrode, Adm.
Tahlequah City Hospital
1400 East Downing
Tahlequah, Ok. 74464

Hayne Richison, Adm. Asst./Chief of Staff
Veterans Administration Hospital
Honor Heights Drive
Muskogee, Ok. 74401

R. E. Morris, Director
Veterans Administration Hospital
921 Northeast 13th Street
Oklahoma City, Ok. 73104

TRANSPLANTATION CENTERS IN OKLAHOMA

For emergency purposes pertaining to the transplant or removal of organs, call the following and ask for the nephrologist on call:

Veterans Administration Hospital
921 Northeast 13th Street
Oklahoma City, Ok. 73104
405/272-9876 Ext. 425

St. Anthony Hospital
1000 North Lee

Oklahoma City, Ok. 73102
405/231-1811

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BOOK REVIEWS

SYSTEMIC PATHOLOGY, Vol. 1: Cardiovascular System. Edited by William St. Clair Symmers. Edition 2, 428 pages plus index. New York, Churchill Livingstone, 1976. Price \$45.00.

The second edition of this major work dealing with systemic pathology will appear in four volumes. This volume, the first of the four to be published, covers the cardiovascular system, the upper respiratory tract, and the lungs. It is written by thirty-eight British authors.

There is considerable variation in approach in the various chapters. However, all are generally of high quality. Each comprehensively presents disease entities illustrated by their morphological changes in the systems covered. The illustrations are generally of good quality, and the references are well organized.

The chapter on the heart is a revision of the presentation in the first edition by the late Dr G. Payling Wright. The chapter on the lungs is lengthy, comprehensive, and very well done. The chapter on congenital anomalies of the heart and great vessels is not up to the caliber of the others, and does not include certain recent developments.

This book can be recommended as providing a thorough presentation of cardiac and respiratory pathology, with the limitation as noted above. *Harris D. Riley Jr., MD*

THE BIOLOGIC AND CLINICAL BASIS OF INFECTIOUS DISEASES by Guy P. Youmans, MD, Philip Y. Paterson, MD and Herbert M. Sommers, MD, 813 pages, W. B. Saunders Co., Philadelphia (1975), \$17.50 for hardcover and \$12.95 for softcover.

This textbook had its genesis in a nine-year experience with an interdepartmental course in infectious diseases for medical students. The editors and their authors, who are colleagues, have prepared a textbook to appeal to the medical student by coordinating a background in

medical microbiology with clinical infectious diseases. It begins with a well-done section on host-parasite relationships. There is commendable emphasis on host-defense mechanisms. This is followed by a description of diseases of various anatomic and/or organ systems. In many sections there are clear and appropriate descriptions of techniques for obtaining and interpreting cultures, susceptibility data, and other laboratory findings.

There are certain glaring omissions. Hospital-associated infections receive little or no consideration, although diseases due to anaerobic bacteria, rickettsiae and zoonoses are covered. There is little attention given to parasitic infections. Some chapters have not been edited as thoroughly as others and tend to be verbose.

All in all, this is an excellent book for the medical student. House officers will find it also of value, but it is not appropriate for the specialist in infectious diseases. It can be recommended for the purpose for which it is intended. *Harris D. Riley, Jr., MD*

MANUAL OF ACUTE BACTERIAL INFECTIONS EARLY DIAGNOSIS AND TREATMENT by Pierce Gardner, MD and Harriet T. Provine, BA, 388 pages, Little, Brown and Company, Boston, Mass. (1975), \$9.95.

This is a manual designed to aid in diagnosis and management of the more common bacterial infections in children and adults. It was originally designed for use by students and house officers at Children's Hospital, Beth Israel Hospital and the Massachusetts General Hospital, Boston. Its basic thesis is to outline the therapeutic steps for early stages of infection before the bacterial etiology or antibiotic susceptibility results are known. The text is in outline form and there are sections on diagnosis and management of specific infections which are listed according to anatomic location or system. There are also sections on the collection and handling of specimens; tables of antimicrobial therapy, choice and dosages; and laboratory aspects of diagnostic microbiology.

This should not be regarded as a replacement for a textbook, but for the particular use, for which it was designed, it is helpful. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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Thermography— A Negative Appraisal

JOE M. PARKER, MD

Is thermography the answer to early detection of breast cancer? The public is being told so in repeated local news media releases. But what are the scientific facts?

Thermography is not a new method for studying breast disease. Since ionizing radiation is not used in performing thermography, its utilization in screening populations of asymptomatic women has had recent impetus because of the criticisms and publicity about xeromammography. Many claims such as "thermography may detect breast cancer before it can be seen on x-ray" are, I believe, misleading and dangerous. Many women are being led to believe that a normal thermogram and physical examination are sufficient to rule out possible cancer of the breast.

The Food and Drug Administration (FDA) ruled in October 1976 that the "technique of thermography should be restricted for use solely as a complementary diagnostic tool."¹

The FDA also quotes the American College of Radiology and the American Thermographic Society as follows: "This technique is not an adequate screening method for the detection of breast cancer or other breast disease when used alone or with only a physical examination."

The FDA bulletin further quotes the Medical Society of the District of Columbia: "Thermography is of negligible value if used as the sole method of breast evaluation," and further noted that, "women screened only by a thermogram should not be given the impression that a fully satisfactory breast examination was made."

Feig, *et al*,² recently evaluated thermography, mammography and clinical examination in breast cancer screening, including 16,000 cases of their own which included 139 proven cancers. Thermography was positive in only 39 percent of the cases where cancer was shown to be present. The most revealing part of the study was an analysis of the size of the lesion correlated with thermographic findings. Lesions 0.5 centimeters to 1.0 centimeters diameter had positive thermograms in only 21 percent of the total cases (29). Lesions larger than 3.0 centimeters in size showed a positive thermogram in 83 percent of 12 cases. Seventy-five percent of these were palpable and I believe this should have been higher in expert hands. (It is generally felt by surgeons that a 2.0 centimeter lesion should be detectable by palpation with few exceptions.)

I would conclude from these results that thermography is not effective in detecting early breast cancer when the lesion is most favorable for cure.

Markowitz, *et al*,³ evaluated thermography as a screening tool for minimal and Stage I breast cancer. Forty-two early cancers were evaluated by both experienced and inexperienced readers of thermography. Their conclusions were: "The true-positive rate for thermal interpretation on the same side as the cancer is less than the false-positive call rate even in the hands of expert thermographers." There is "no ability of thermography to select patients harboring early carcinoma, currently detectable (mammography and physical examination) by other means, from a general population of patients." In other words, they feel that thermography is totally lacking in ability to reveal early breast cancer when it is in the most favorable state for complete cure.

The recent scare about the radiation hazards of xeromammography that has permeated all the national news media has given impetus to a search for alternate methods of breast screening programs, including thermography. However, it seems that better methods of detection should be forthcoming, including ultrasound and the development of film that requires very little x-ray exposure (less than 0.1 rad per view).

The true limitations of thermography are, we trust, becoming obvious to even the most enthusiastic supporters of this method which is both expensive and requires considerable time and effort. Patients must "pre-cool" 30 minutes or more in rooms where the temperature is rigidly controlled and monitored at all times. The machines are delicate, require frequent repairs and service. It is my belief that a substantial amount of money has been spent in Oklahoma in the last three to four years trying to prove the value of thermography. Let us hope we can go on to something more productive.

Persistent rumors circulate to the effect that a chemical test for cancer of the breast is just around the corner. However, actual reporting of such news has not been recorded. A blood test that positively identifies those patients that harbor a mammary cancer would make all other methods of screening and detection superfluous.

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It may be premature to declare Oklahoma the mecca of organized medicine in this country, but one thing is apparent, our state medical association has a nationwide reputation and is respected throughout the country.



While I attended the recent American Medical Association meeting in St. Louis, this reputation for excellence became even more obvious to me. For example, during one of the lunches we hosted representatives from Texas, Kansas, Arkansas, New Mexico, Arizona and Indiana to explain our Washington lobbying program. No state medical association in the country can equal the innovative and productive national lobbying approach we have developed.

During the same meeting our staff met with representatives from other state societies to explain the highly productive public service program we developed a year or so ago. This program has brought nearly \$100,000 of no-cost public service programming to the association, and rights to these thirty-second ads have now been purchased by two other states and several other states now appear interested. It should also be pointed out that as a result of Oklahoma's persistent and convincing arguments, the AMA has now embarked upon a national advertising program to promote the merits of our present health care delivery system. This was not an easy program to pass through the House of Delegates, but once again, Oklahoma led the way.

Of course, the primary reason Oklahoma has been so successful is the very capable leadership of our AMA delegates and alternates. Like

our association itself, they are well-known and well-respected. There are many other accomplishments I could point to, to demonstrate the effectiveness of our state organization. A few of these are . . .

*The Oklahoma Utilization Review System which continues to be heralded as a possible prototype for PSRO in this country. This month the AMA will receive a special report on OURS and we are making every attempt to export the idea to other states. Our unique approach to PSRO in this state makes the OURS program attractive and cost effective. In fact, a recent staff visit from the House Committee on Ways and Means found OURS to be unique in its concept, its design and the cooperation it receives from the medical community.

*Our political action committee . . . OMPAC, which is one of the strongest in the nation. This year we once again received an award from the American Medical Political Action Committee for having all OSMA officers and AMA delegates as sustaining OMPAC members. On the national level, Oklahoma City pathologist, Dr Rex E. Kenyon, continues to serve as AMPAC chairman.

*The strength of our own association is demonstrated in the membership award which we won again this year. Our numbers continue to grow larger, our efforts are unified, and we are the only association in the country which can claim to have given its full support to organized medicine through unified membership for over twenty-five years. Approximately 90 percent of the physicians in this state are OSMA members, a tribute to our effectiveness.

Each of you has reason to be proud of your state medical association. □

Marvin K. Margo M.D.

Introduction to Microsurgery

B. J. RUTLEDGE, MD

*What the eyes can see the hands can do.
Microsurgery was pioneered by the otologists.
Recent expansion of microtechniques
by neighboring surgical specialists
is revolutionary.*

Otolaryngologists can take indisputable credit for introducing the operating microscope to the surgical world. The operating microscope was first used by Maier and Lion¹ in labyrinthic surgery in experimental animals in 1921. C. D. Nylén² used a monocular microscope in humans the same year. The first microsurgical fenestration was performed by the Swedish otologist, Gunnar Holmgren,³ in 1923 using a binocular operating microscope. G. E. Shambaugh⁴ applied the operating microscope for a one-stage fenestration operation in 1940. Subsequently other ear operations were technically improved utilizing this new tool.

Ophthalmology was the next discipline to utilize the operating microscope as

documented by Perritt⁵ in 1950 and Barraquer⁶ in 1956. The Opmi-1 microscope was introduced by the Zeiss Company in 1951 and this is still the basic microscope used by most surgeons today.

Theodore Kurze⁷ introduced the operating microscope in neurosurgery in 1957 when he developed a subtemporal transmeatal approach to the internal auditory meatus for removal of an intracranial acoustic neurinoma.

The first publications on microsurgical operations for brain tumors appeared in 1961 and 1962 by William House,⁸ an otologist, and Ted Kurze and Jack Doyle,⁹ neurosurgeons. Dr House has done pioneer research in acoustic neurinomas and developed a very fine microsurgical laboratory which has served as a model for many other microsurgical laboratories over the world.

J. H. Jacobson and Peardon Donaghy¹⁰ can be called the fathers of microvascular brain surgery. In 1960 they attempted to do an endarterectomy of the middle cerebral artery utilizing the operating microscope. In 1965 Harry Buncke,¹¹ a plastic surgeon, introduced microsurgery in transplant surgery of the extremities after working in the laboratory of Donaghy and Jacobson in Burlington, Vermont. Larry Pool¹² and Bob Rand and Peter

Jannetta¹³ reported the use of microtechnique in the treatment of intracranial aneurysms in 1956 and 1957 and the following year Jannetta reported its use in cranial nerve surgery particularly of the fifth and seventh cranial nerves.

Microsurgery is utilizing not only the operating microscope but microinstruments, microsutures and needles, microdrills, and the bipolar cautery which was developed by Leonard Malis¹⁴ in 1956. Dr M. Gazi Yasargil, a neurosurgeon in Zurich, Switzerland, studied in the microvascular laboratory of Donaghy in Burlington in 1966 and 1967 at which time he developed many microinstruments suitable for microneurological surgical procedures which require longer handles than instruments in other surgical specialties. During this period of study he developed the extracranial-intracranial bypass procedure anastomosing the superficial temporal artery to the middle cerebral artery requiring 10-0 suture. It was only after this that neurosurgeons over the world began to adopt microtechniques.

In aneurysmal surgery microtechnique allows a much smaller craniotomy with less ex-

posure and retraction of the brain. Important perforating vessels can be seen allowing only the neck of the aneurysm to be clipped. This technique should reduce the operative mortality in those patients graded I or II (alert) to below five percent. Microsurgery has improved the teaching of surgery because the microscope will accommodate the use of a 35 mm camera to provide photographs for a permanent record, a cine camera for production of teaching films, and the video camera to accommodate live observation as well as recording the procedure for future use.

The fact that neighboring specialists operate in overlapping areas permits complementation of their respective arts resulting in our common objective of providing the patient with optimal surgical care.

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Certified by the American Board of Neurological Surgery, B. J. Rutledge, MD, was graduated from the University of Oklahoma College of Medicine, where he is professor of surgery in the Division of Neurological Surgery. Among his medical affiliations are the International College of Surgeons, the Congress of Neurological Surgeons, the American Association of Neurological Surgery, the American College of Surgeons and the Southern Neurosurgery Society.

Pituitary Disease: The Endocrinologist's View

JAMES L. MALES, MD

Pituitary disease usually involves both local anatomical distribution and distant effects of hormone excess or deficiency. This paper summarizes some clues to the detection of certain activity disorders and goals of treatment.

The pathophysiology of neuroendocrine disorders logically draws the fields of neurosurgery and endocrinology into close contact. For many neuroendocrine lesions, dual disease processes exist: A) the local anatomical lesion and, B) the distant hormonal effects. Good health for the patient requires detailed attention to both the components of the neuroendocrine disease process. The tumor must be dealt with, as must its distant effects. Too often the central anatomical lesion has been successfully treated, yet because of hormonal abnormalities the patient failed to do as well as desired. Technical advances in hormone measurement, in noninvasive central nervous system diagnostic maneuvers, and in optically-assisted microsurgery have greatly increased the interest among endocrinologists and

neurosurgeons in the treatment of neuroendocrine disease.

DIAGNOSTIC TESTS OF PITUITARY FUNCTION

The rationale for performing any test is to gain information useful in the management of the patient. Commonly, in the case of pituitary disease, a "map" of the hormonal capabilities of the pituitary is desired. This is helpful in the immediate diagnostic period, but frequently the initial bank of data is invaluable in longitudinal follow-up and re-evaluation. In 1970, "pituitary evaluation" required approximately seven-to-ten days of hospitalization. Today, it can be done in one-to-three days. Table 1 shows a typical schema.

In the study of destructive lesions of the pituitary or hormonal deficiency states,

TABLE 1
SCHEDULE OF PITUITARY TESTING

Day 1	11-DOC, cortisol, T ₃ RU, T ₄ , T (E ₂), FSH·LH Urine Sp. Gr. TRH test for TSH, PRL (GH)
Day 2	Radiographs - Visual fields ITT + ATT for cortisol (ACTH) and GH Metyrapone at 12:00 midnight
Day 3	11-DOC, cortisol Dismiss or Steroid coverage →→ invasive tests or surgery

TABLE 2

STIMULATION TESTS OF
PITUITARY FUNCTION

TEST	STIMULUS	RESPONSE
Insulin tolerance	Hypoglycemia	GH > 10 ng/ml F rise
Arginine tolerance	Arginine	GH > 10 ng/ml
Exercise	Exercise	GH > 10 ng/ml
L-Dopa + Propranolol	Dopamine	GH > 10 ng/ml
TRH	Hypophysiotropic tripeptide	TSH, PRL, (GH)
GnRH	Hypophysiotropic decapeptide	LH, FSH
Metyrapone	↓ cortisol level	ACTH

pituitary-stimulating procedures are most widely used. Table 2 lists the most common of these. The insulin tolerance test or, more correctly stated, insulin-induced hypoglycemia is the most time-consuming and difficult of those procedures to perform, but has the benefit of allowing assessment of two important hypothalamic-pituitary hormone systems with one test; namely, growth hormone responsiveness to hypoglycemia and adrenocorticotropin-cortisol responsiveness to the same stimulus. The use of synthetic thyrotropin releasing hormone (TRH) is now becoming widespread. Its usefulness may be greater in the evaluation of primary thyroidal disorders but, nonetheless, its ease of administration, its normal stimulation of both thyroid stimulating hormone (TSH) and prolactin (PRL), as well as the stimulation of human growth hormone (GH) in certain patients with acromegaly, make it ideal for pituitary testing. Gonadotropin releasing hormone can also be used to provoke the pituitary to release follicle stimulating hormone (FSH) and luteinizing hormone (LH).

Metyrapone has been used for years to block the 11-hydroxylase enzyme in the adrenal gland, causing marked and rapid fall of plasma cortisol and thus a potent physiologic stimulus for adrenocorticotropin (ACTH) secretion. Previous methods for doing this test required three days of urinary studies but currently ACTH responsiveness to lowered cortisol can be adequately studied with the single dose, midnight administration of metyrapone with before and after measurements of both plasma cortisol and 11-desoxycortisol.

Suppression tests are those procedures performed to study the control system of pituitary

TABLE 3

SUPPRESSION TESTS OF
PITUITARY FUNCTION

SUPPRESSION TESTS	SUPPRESSANT	HORMONE AFFECTED
TEST		
Glucose loading (GTT)	glucose	GH
Dexamethasone	glucocorticoid	ACTH

function or pituitary end-organ axis where the basic disease is suspected to be hyperpituitarism of some variety (Table 3). For example, the inability of glucose loading to suppress GH concentrations to low levels is a diagnostic hallmark of acromegaly. Similarly, the inability of the synthetic glucocorticoid, dexamethasone, to suppress ACTH and cortisol levels in Cushing disease is well recognized. A regularly abnormal suppression test for inappropriate prolactin secretion has not been developed.

SPECIAL CLINICAL ENTITIES

Acromegaly: The clinical hallmarks of acromegaly are well known. Hormonally, the hallmarks are elevated and glucose-insuppressible GH concentrations. Often a paradoxical rise in GH levels is seen after both glucose or TRH administration. The therapeutic goals in dealing with this disease vary somewhat with the age of the patient and with the degree of irreversible (principally skeletal) acromegalic changes. For young patients, ablation of all GH secretion is the goal. Microsurgery offers a method which can most rapidly restore the GH levels to normal and yet preserve other pituitary function. In the absence of an anatomical distortion which requires surgical treatment (optic chiasm compression), proton beam or cobalt irradiation are generally considered therapies of choice for long-standing, advanced acromegaly. Both of these methods result in a significant decrease in GH levels, but several months to years are required for the response to become noticeable.

Cushing disease: Inappropriate ACTH secretion due to hypothalamic or pituitary dysfunction causes Cushing syndrome due to bilateral adrenal hyperplasia. The biochemical hallmark is one of a "re-set" hypothalamic-pituitary thermostat: ACTH secretion can be suppressed, but only at levels of cortisol or glucocorticoid in excess of normal physiologic concentrations. Thus, in Cushing disease, the

low-dose dexamethasone test does not suppress ACTH or cortisol levels, but the massive dose (8 mg daily) does. The goals of treatment are to restore normal physiology, to prevent Nelson syndrome (vide infra), and to avoid Addison disease. Not all cases of Cushing disease present with a documentable pituitary adenoma, but those which do should be well suited for treatment with microsurgery. Cobalt⁶⁰ is generally successful in children, but less effective in adults. Bilateral adrenalectomy promptly corrects elevated cortisol levels, but immediately creates primary adrenal insufficiency (Addison disease) and sets the stage for pituitary tumor developing after adrenalectomy (Nelson syndrome).

Nelson syndrome: At least 10% of patients with Cushing disease will develop an ACTH-secreting pituitary tumor if bilateral adrenalectomy was the original procedure used to treat Cushing disease. Intense cutaneous hyperpigmentation, headache and sundry endocrinologic abnormalities ensue. The sella turcica becomes enlarged or destroyed. Markedly elevated levels of ACTH are insuppressible to any dose of dexamethasone. These tumors are generally quite radio-resistant and neurosurgery is almost always required.

Prolactinoma: Approximately one-third of all chromophobe adenomas are thought to be associated with elevated PRL levels and about one-third of all patients with elevated prolactin levels will experience galactorrhea. Elevated prolactin levels generally cause hypogonadism — amenorrhea in women; infertility and diminished libido in men. Even small prolactin-secreting tumors may cause some bony distortion detectable by sellar polytomography. Hormonally, the best indicators of a prolactin secreting tumor are greatly elevated

prolactin levels (>100 ng/ml) and/or high basal PRL levels which fail to normally stimulate after TRH. While the diagnosis of prolactin-secreting pituitary tumors has become relatively sound, therapy for such patients remains problematical. Microsurgery is well-suited for many such patients, but the success rate seems to be far less than desired. Irradiation has also been used with some success. Unfortunately, American physicians and their patients are currently deprived of drugs which may well represent the most reasonable therapeutic approach. Bromocriptine is the agent of choice and is available throughout most of the world. It has not been released for clinical use by the Federal Drug Administration in the United States.

Secondary pituitary tumor: Presumably as a consequence of long-term hypothalamic-pituitary secretion in the absence of normal feedback signals, pituitary tumefaction has been noted recently in primary end-organ failure, notably in childhood hypothyroidism, adult myxedema and Klinefelter syndrome. As opposed to Nelson syndrome, both the tropic hormone and the pituitary size can be suppressed (and an expanded sella returned to normal) by supplying physiologic levels of the end-organ hormone (thyroxine or testosterone). Such treatment restores normal physiology and generally obviates any form of destructive therapy aimed at the pituitary gland. The key for appropriate therapy in secondary pituitary tumor is the recognition of the abnormality. Sellar enlargement, low end-organ hormone levels and elevated pituitary tropic hormone levels are the biochemical characteristics.

LONG-TERM CARE OF HORMONAL DEFICIENCIES

Hormonal replacement for hypopituitarism is currently very adequate and the future holds the promise for great innovations in this area (Table 4). Part or all the effects of the pituitary hormones (save for prolactin) can be adequately clinically replaced. ACTH is the hormone most critical for life. While ACTH itself cannot be physiologically replaced, steroid hormones which are identical to or closely similar to native cortisol can be easily administered at a level which approximates the normal adrenal production of cortisol. Commonly, 20 mg of hydrocortisone is given in tablet form in the morning and 10 mg in the evening. It is critical that the patient be care-

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TABLE 4

PITUITARY REPLACEMENT TREATMENT

HYDROCORTISONE, 20 mg each AM and 10 mg each PM
 AUTOMATIC STRESS INCREASES!!
 HUMAN GROWTH HORMONE, 2-3 U IM 3 times per week
 L-THYROXINE, 0.15 - 0.2 mg daily
 TESTOSTERONE ENANTHATE (Depo-Testosterone), 100-300 mg IM every 3 weeks; less in old age
 CONJUGATED ESTROGEN, 1.5 - 2.5 mg in cycles
 PROGESTERONE (Provera), 5 mg daily in last week of cycle
 DDAVP 0.05 - 0.1 ml intranasally 1 or 2 times per day
 VASOPRESSIN-TANNATE-IN-OIL, 5 U IM every 2-3 days
 CHLORPROPAMIDE (Diabinese), 250 mg daily
 CLOFIBRATE (Atromid-S), 500 mg 4 times per day

fully educated in how and when to temporarily increase his hydrocortisone dosage in the face of stressful environmental circumstance. Readmission to the hospital, morbidity and even the loss of life can be prevented by relatively simple educational methods.

In the ambulatory alert patient, diabetes insipidus due to antidiuretic hormone (ADH) insufficiency is a great bother and it may deprive the patient of sleep but is not an acute threat to health. However, in any circumstance where the patient's sensorium is clouded, diabetes insipidus takes on a much more formidable role. In the past, treatment has been quite successful in most cases using vasopressin-tannate-in-oil and this can still be regarded the standard therapy. Local reaction and antibodies sometimes are formed to bovine vasopressin and eventually preclude its use. Virtually every case of diabetes insipidus can be controlled by five units of vasopressin-tannate-in-oil given deep intramuscularly by injection. It is important that the oil-and-hormone containing vial be adequately pre-warmed and agitated prior to injection. Patients experience the most comfort if they receive their injection in the evening so that at least on the night of the injection of vasopressin they are assured of a restful night's sleep.

Chlorpropamide and clofibrate both work to

a greater or lesser degree in helping to control central diabetes insipidus, but the greatest advance in the control of diabetes insipidus has been the development of the synthetic analogue of human vasopressin, DDAVP. DDAVP is a synthetic polypeptide very similar to native antidiuretic hormone and can be administered intranasally. The drug is unique in that it possesses potent antidiuretic effects but lacks the pressor effects seen in other preparations of vasopressin.

For documented GH deficiency, either congenital or acquired, there now exists a ready supply of the hormone extracted from human pituitary glands. Although expensive, this treatment should be offered to any youngster suffering a growth disorder due to pituitary insufficiency.

Traditionally, three grains of thyroid extract or 0.3 mg of 1-thyroxine was thought to be the appropriate dose for treating primary hypothyroidism or hypopituitary patients. Current information, however, has shown that these dose levels are excessive and most patients on the equivalent of 0.3 mg of 1-thyroxine daily will show some evidence of hyperthyroidism. A dosage level of 0.15 mg 1-thyroxine daily is generally adequate.

Oral testosterone medications seem to be less potent in their ability to cause development of secondary sex characteristics and maintenance of libido than the injected esters of testosterone. Testosterone enanthate (Depo-Testosterone^R) varying in a dosage from 100 to 300 mgs every three weeks is commonly used for hypogonadism. This dose can be lowered as the patient age advances. For women who lose their pituitary function during or prior to the reproductive years, conjugated estrogens given in cycles along with a cyclical progesterone agent are recommended. The use of these drugs normally would be terminated at the usual age of menopause.

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Aims and Goals of A Department of Medicine

SOLOMON PAPPER, MD

The aims and goals of the Department of Medicine at the OUHSC in Oklahoma City are the achievement of humane scholarship.

The problems along the way and their potential solutions are described.

It is appropriate that a joint regional meeting of the American College of Physicians and the Oklahoma Society of Internal Medicine provides a forum to discuss departments of medicine in general. And because of its importance to the region, I am pleased to share some thoughts specifically about the Department of Medicine at the University of Oklahoma in Oklahoma City.

Instead of leaning on several excellent treatises on this subject, I have elected to make this presentation a highly personalized one, albeit incomplete. I shall begin with some general remarks about departments of medicine.

GENERAL REMARKS

Medical schools, since Flexner's time, have traditionally used the three legged stool to de-

pict graphically the equal importance of Education, Patient Care and Research. For many years I have seen the same roles in somewhat different perspective (Figure 1). The center of focus is *people* and their total health. Thus, a medical school is a center for *humane* concerns. As such, it is by definition related to the community it serves. And since a school is educational and should work toward a better future (ie, via research as well as education), a medical school is a center for *humane scholarship*—the phrase I use to describe what I think academic medicine *should be* about.

The term humane encompasses two major concepts. First, compassion, and second, justice. Justice is used recognizing that we serve *all* people, and in fact that we do *not* place value judgments on the worth of any patient. Scholarship is much easier to define, as the search for truth. In medicine, scholarship includes two general facets. First, bringing to the patient, medical student and house officer, the best scientific knowledge available, and second, scholarship encompasses the need for research in order to develop and generate new information. The term *humane scholarship* includes then what Buber, a distinguished philosopher designated as the three themes for human consciousness: (1) concern for justice; (2) compassion; and (3) respect for scholarship. It is really not surprising that the overall aim of a medical school should be very comparable

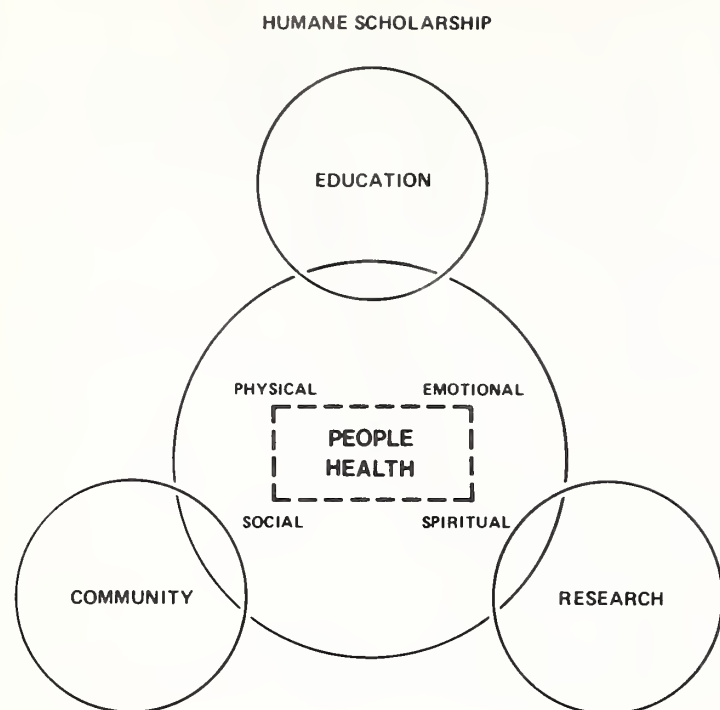


Figure 1: A proposed substitute for the three legged stool.

to philosophic themes for human consciousness, because no educational system should be more humane than one educating physicians.

A department of medicine is ideally suited for implementation of the goal of humane scholarship. Internists are usually interested in, educated for, and concerned with the broadest facets of preventive, diagnostic, and therapeutic aspects of medicine. The internist's approach tends to be thoughtful and is concerned with total human biology, defined as including the physical, emotional, spiritual, social, and environmental factors that impinge on man. The base of internal medicine is surely general medicine. Even in order to be a *good* subspecialist, one first has to have the breadth and scope of the general internist. The coupling of this very broad professional discipline which is ours, with the philosophic emphases we have reviewed makes internal medicine a key unit, although surely not the only one in promoting a school of medicine committed to humane scholarship.

I regard internal medicine as one of the major fibers of medical education, around which the rest of the fabric is developed. I believe this, knowingly exposing myself to misinterpretation, distortion, and the charge of parochialism. Yet our discipline is commonly the largest contributor to the teaching pro-

gram. Note, I have not said that medicine is the most important clinical specialty. That, I believe is an unresolvable issue, one that probably should never be raised. To the child with strabismus, the physician who discovered the strabismus and the ophthalmologist are clearly the most important. But for the educational process, I believe that internal medicine occupies a pivotal position which does not minimize or detract from the critical importance and contribution of other disciplines. But medicine can never develop alone. It must be paralleled by quality in all fields, and therefore, medicine must be supported by and lend support to other departments.

SELECTED PROBLEMS

While generally decrying a problem-laden orientation to life, I think it might help us to examine some selected problems that currently serve to inhibit the accomplishment of worthy professional goals by departments of medicine in the United States. Some of these, indeed most, are applicable to problems at the University of Oklahoma.

1. **Economics** is a great source of difficulty. Although state support varies throughout the United States, it is commonly marginal. Private schools also suffer because of the nationwide economic distresses of inflation and intermittent recession. And of course, federal support has dwindled in the past several years. Added numbers of students and other obligations along with the fewer total monies have caused medical schools to look to other sources of support for their needed faculty. The obvious one that has come back into the picture in recent years has been the practice of medicine by a full time faculty. And that has advantages and disadvantages.

2. **Subspecialization** has mushroomed, and has resulted in great advances. It was a necessary development that has led to improved patient care and teaching in many instances. However essential it is, subspecialization has also caused problems for departments of medicine. Some subspecialists have forgotten that general medicine is the mother discipline. They have lessened their personal, philosophic, and professional ties to the department of medicine and to their colleagues in other subspecialties. Their disparate opportunities for deriving income have led to internal strife within departments of medicine. Some sub-

specialists, with greater earning potential, have difficulties grasping the need in a department of medicine to share to some extent their earnings with equally valuable programs in fields that cannot be high earners. The fragmentation in professional, philosophic, and economic terms that may occur results in territorial concerns that loom larger in some instances than the overall educational issues at hand. On the other hand, generalists sometimes mistrust subspecialists and even resent their place in the limelight.

3. Volume. Medical schools have increased in size enormously. And the University of Oklahoma is no exception. The numbers of students, house staff and faculty have increased. Inevitably, this results in some degree of depersonalization and less day-to-day contact by people who need to see each other and who benefit from close contact. It is very difficult in this life to maintain quality standards in the face of increasing volumes. Departments of medicine have been no exception.

4. Problems of the Times. There are many societal issues that overflow into the academic medical community and at times appear to engulf us. Life in general has become more complex and there is far more turmoil and unrest in the world. The same is certainly true in the medical school environment. These are problems of living for all of us that add a sense of agitation and frustration.

There has also been a kind of triumph of technique over purpose. An example is the educationist (not educator) who deals with notions and gimmicks rather than people. Another is the physician or student who may forget that the diagnostic or therapeutic technique employed is for a human purpose.

There also seems to have been in recent years a kind of general vague depression of the spirit. I really have no explanation for this. It has allowed some to make a friend of defeat and a companion of hopelessness. This depression of spirit, along with turmoil and complexity of life results in serious man-made problems, and in my view, most of the problems, in medical schools and in departments of medicine are man made. In a sense, this applies even to the economically determined problems. Impaired financing results in two kinds of problems. First, it causes limitations in academic programs, and second, it is accompanied by adverse human responses to the decreased resources — responses which are com-

monly just as detrimental as the restricted resources themselves.

In addition, we have seen other new trends that have occurred throughout society which impinge on and include those of us in academic medicine. Our students, house staff and faculty wish to be more directly involved in the decision-making process in all areas of activity, including, for example, curriculum. I believe these changes have in general been very good ones. On the other hand, I also have little doubt that the amount of time that students, house staff and faculty sometimes spend in *evaluating* programs could better be devoted to studying medicine. I also have little doubt that some of the faculty involvement in committees could be better spent in developing and nurturing their own professional skill levels, and relating to students, house staff and patients.

These are some examples of major problems as I see them. The impact of these problems on the Chairman will be considered later.

SELECTED SUGGESTED "SOLUTIONS"

I have no magic and no great formula for solving these problems. As the years have gone by, I have stopped defining solution in terms of anything resembling an ultimate or final solution. Rather, my present definition of solution is that, with good fortune, tomorrow will be somewhat better than today. But I do have some thoughts that attempt to deal with these problems.

1. Simplify. I think that it is essential to find ways to simplify our lives. In the small microcosm of the universe called a department of medicine, is it possible, in 1978-79 to do anything that will result in simplification? I think there are some measures that can at least be

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tried. One of the key ones is to have people within the department recognize and be able to articulate their own need and desire to simplify *their* lives. Second, is that the large numbers of committees that exist within most departments, including our own, certainly can be diminished. Another step is to delegate a considerable amount of the administrative responsibility *and authority* and I shall return to that.

2. **Subspecialists.** One can also attempt to continue to attract subspecialists who recognize that they are internists, and that their support of general internal medicine is essential, not only for the school, but for their own welfare in advancing themselves as very good professional subspecialists. Simultaneously, generalists must recognize that the subspecialties are critical to quality development.

3. **Private Practice.** I think that limited private practice by full time physicians in the academic world is worthwhile for several reasons; to nurture the clinical skills of the faculty; to attract patients to the medical center for the education of students and house staff; to have a more palpable community impact, and finally, it is important in the economic life of the department of medicine in the school.

4. **Behavior "Modification."** Also, some of the attempts toward solutions can come from frank self-analysis of one's behavior patterns when confronted with the reality of inadequate funding. Americans have become accustomed to equating progress and development with increase in size. It is essential for us now to recognize that that era is a thing of the past. Yes, we can expect to grow in certain ways at certain times, and with certain specific needs, but it is important for us to discipline ourselves to understand that we always need to improve *quality* in the programs and that improvement in *quality* sometimes requires growth in space and numbers, but sometimes it does not. *More* is not always the answer. There is a need for self-evaluation, and a consideration of where the times have taken us. All of us, not only in academic medicine, are too busy and suffer from not taking sufficient time for the quiet periods of reflection, introspection and discussion of what is really important. We need those interludes badly to consider what we are doing with our lives.

5. **Committees.** I suggest, as many others have, eliminating all useless medical school committees. This would be an enormous time-saver. However, there are inevitably valuable people within departments of medicine who, for reasons not known to me, have a desperate need to be involved with technique and trivia. For them and their well-being, I suggest that one of the things we do is maintain a parking committee. The parking committee has much to be said for it; it will never solve the problems; it will never do any great harm, nor any great good, and it will go on in perpetuity.

LOCAL AIMS AND GOALS

We can now proceed to define some of our specific aims and goals as a Department at the University of Oklahoma in Oklahoma City. Much of this has already been covered in terms of my previous general statements of the goals of a department of medicine. I hope you will forgive a few personal remarks because the aims and goals are, to some degree, inevitably related to the style and person of the Chairman.

As I have told many of you before, I am not Stewart Wolf. I admire Dr Wolf a great deal, and have done so for many years. I am also not Dr James Hammarsten — who is a very close friend of mine. I am, in fact, only Sol Papper, and I bring to the leadership of this department whatever skills and deficiencies I have, the attitudes I have, and the background that comes with me. I am a general internist by nature, disposition, inclination and action. And although I am very interested in the subspecialty of nephrology, it is not a sole way of life for me.

Obviously, in an educational institution, education is the first and primary goal. However, as I see it, in a clinical department, education derives primarily from the care of patients entrusted to us. Therefore, from my point of view, first — and foremost, in the aims or goals is the dedication and commitment to excellence in patient care. In some education circles, one hears the hospital likened to the laboratory experience of the students in the first two years. This analogy I regard as totally inappropriate. A hospital is primarily for the care of the sick. It is not a laboratory. I believe that if we practice quality medicine on our wards and in our clinics, the clinical portion of our teaching programs for house staff and for medical students will largely be accomplished.

Lectures and seminars do add a body of knowledge, and can make a difference in attitude. But we can talk to students and house staff all we want about meticulous medical care, and unless we really practice it, and can teach it by example, I believe the words are largely wasted, and we are engaged in high order self-deception.

Few hospitals are perfect, and certainly the University Center is not perfect. This should be stated to our students and to ourselves, very candidly. But great improvement has occurred and continued improvement is projected, and in fact, going on right now. We all know that many hospital institutions with areas of deficiency have produced fine perceptive physicians. This is possible only because of frank recognition and admission of the situation, a constant open striving for improvement, substantial evidence of progress, and good people.

OUR TEACHING PROGRAM

The Medical Student. The Department of Medicine is now given responsibility for a second year course called Introduction to Clinical Medicine. It is the student's first exposure to taking a history directly and to performing a physical examination. It presents an opportunity for nurturing humane scholarship, and developing those technical skills so important to the basis of all medicine. I personally try to emphasize the importance of the course by giving some of the lectures, by interviewing patients and performing a physical examination before the class, and most importantly, by taking my own preceptor group of four students. Our third year clinical clerkship has been modified to include more faculty-student contact on the ward and in lectures. Our fourth year program consists of an ambulatory care experience and a variety of electives. We are now defining for the fourth year students the specific knowledge to be acquired during each elective period. One of our highest current priorities is the development of detailed plans for revamping the general medicine clinic to include the concept of very broad care for the chronically ill. In addition, we are the major contributors to interdepartmental courses, especially Laboratory Medicine and Pathophysiology. We have established a Student Education Advisory Committee chaired by the Departmental Director of Student Education, and consisting of the course coordinators, a student representative from each class and

the president of the Student Council. We meet monthly.

Our *House Staff Program* should evolve from two basic tenets. (1) A very strong clinical emphasis, with the basic assumption that the best way to teach total quality medical care is by example, and (2) the premise that general medicine is the central issue. Thus, decisions are made at the general medical ward level with the attending physician and House Staff assuming the lead responsibility. The attending should *not* be a guest. The subspecialist acts as a consultant. We have the advantage that most of our full time staff wear two hats. At times they take a turn as a general ward attending, and at other times, have subspecialty consultation responsibilities. I think it is a modulating feature to have the opportunity to be on both ends of that relationship.

In my view, our Department of Medicine at Oklahoma should not and will not be simply a group of subspecialty empires. We will continue to emphasize general medicine, while simultaneously emphasizing the obviously beneficial attributes of excellent subspecialty development. I simply cannot see the either/or approach that seems attractive to some people. We need cohesiveness for the common goal of excellence in both general medicine and subspecialties. The entire program needs encouragement, support and nurturing. We recognize the great need for primary care physicians including general internists throughout the state, and we fully expect to encourage people in that direction. However, I cherish the fact that I had the opportunity to select my field, internal medicine, where to practice, and how to do it. And frankly, I would hate to be an instrument for narrowing those same opportunities of freedom for the young people in medicine now and for those to come.

There is much written about a new primary care "track." Most of the proposals are for more experience in ambulatory care, office gynecology, and the like. I have no reservation about such programs provided they include the same rigorous attention to in-depth knowledge that characterizes the field of internal medicine. To celebrate this track as new and creative, however, is to ignore the history of many of the best programs in this country.

We have a House Staff Education Advisory Committee chaired by the Director of the House Staff program and consisting of the Chief Residents and an elected representative

from each year of the program. The committee meets monthly for the purposes of solving problems and suggesting improvement in patient care and education.

Continuing Education. We have substantial responsibility in the area of continuing education, but much more remains to be done in this regard, and I shall return to that aspect a little later.

Research. Another area of activity that primarily subserves our educational goal is research. I believe that research is an essential part of a department of medicine, for several reasons. First, it should help provide a clinical atmosphere of stimulation, open-mindedness, inquiry, and the constant looking to future progress. Second, one of our responsibilities is to provide new knowledge for its own sake. The role of research in a clinical department is sometimes the subject of discussion and debate. In some quarters, research became a sacred cow, worshipped without perspective or critique. Research productivity in some places became the major index for climbing the academic ladder. With this potential plum before young academicians, there was the temptation for some to relegate clinical development and teaching to a secondary role, resulting ultimately in the assumption of clinical responsibility by some individuals who were in fact, inferior clinicians. While I do not believe that the academic community has invariably covered itself with glory in these regards, one also has to be leery of the other extreme where a genuine anti-intellectual attitude opposing research evolves under the guise of total clinical and humane dedication. Rather, balance and perspective must be gained. Research may be defined first, as the asking of a question that is unanswered and should be answered, and second, the elaboration and execution of a plan that offers a reasonable prospect of answering the question clearly. For me, this definition does not include any consideration of the tools of research. Some good research will require observation of patients alone; other research requires simple laboratory tests; and still other investigations demand high-cost elaborate equipment. I believe the tools should be those necessary to answer the question without dictating the research. There is room for the entire spectrum of research in a good department of medicine providing only that it be of good

quality and that it have some impact on students, house staff and fellows. Research has limited positive value and some negative impact when it is merely housed in a clinical department to provide lustre.

IMPLEMENTATION OF AIMS AND GOALS

The requirements for implementing the aims and goals described in order of importance are: (1) the people (faculty, house staff, students, secretarial and technical staffs); (2) the organizational format that serves to facilitate bringing the people together; (3) plans for the future; and (4) the facilities and resources.

THE PEOPLE

Full Time Faculty. We already have strongly positive attributes in a committed faculty, dedicated house staff, concerned students, a core of skilled technologists and a nucleus of office personnel. Let us examine the matter of faculty recruitment more thoroughly.

From what has already been said, it is obvious that we would like to have full time faculty who are interested in, and capable of teaching clinical medicine, interested in general internal medicine, excellent subspecialists, and keenly concerned with good patient care. Many, but not all should be qualified to do quality, *clinical* research. It is obvious that these are stringent requirements, and that the proportion of individual ingredients must have some variation. We are keenly aware of the competition in the national scene, but are unequivocally committed to national competition. We encourage our local faculty to apply for, and compete for these leadership roles. Nonetheless, it is their understanding as well as ours, that they will be selected on the basis of how well they stand up against national competition, or to phrase it differently — we will choose the best person that we can possibly find for every position. Our search committees include full time people within the Department of Medicine, volunteer faculty, as well as people from other departments. This is an extremely time-consuming and difficult activity, but I view *every* faculty position as absolutely precious.

Volunteer Faculty. When I first became a chairman of a Department of Medicine, 16 years ago, I was offered the support of the practicing internists. This was sustained and put

into greater action as the years elapsed. I wrote the following in the *Archives of Internal Medicine* on that subject approximately ten years ago. I still subscribe to it.

I have always believed, and this belief has been fortified these past few years, that the practicing internist has a great deal to contribute to a teaching program, and furthermore, he has something to contribute that the full time faculty often cannot. The practicing internist has given willingly of himself, and with sacrifice in time, convenience and money. I believe he received benefit in return. We have observed the good relationship between full time and volunteer faculty with mutual respect for clinical and teaching contributions.

We have appointed a committee of the volunteer faculty which will have the following functions. (1) To act as a credentials committee for new applicants to volunteer faculty. (2) To review in detail our curriculum in Medicine with two matters in mind: (a) to analyze in what courses volunteer faculty can best participate; (b) to suggest modifications in the courses to enhance the participation and effectiveness of the volunteer faculty. (3) To provide better organization and review of our volunteer faculty participation.

It is evident that volunteer faculty now teach in the Health Sciences Center as well as in our community hospital programs. These are both essential contributions to our teaching efforts.

The Chairperson. While considering personnel, what about the Chairman? In recent years we have seen too rapid turnover in the United States as well as great difficulty in filling Chairs of Medicine. Braunwald, perceiving the serious implication of the problem led an intense study of the reasons for the problem and its impact. The data were reported in 1975, and I quote only one paragraph:

We have learned that leading the departments of medicine of American medical schools we have a group of harried, exhausted, overworked, albeit well-paid individuals, who see themselves as unsuccessful professionally and who are perceived as such by key members of their departments. 16% of the Chairmen, and only 6% of those now under the age of 50 years plan to remain in their current positions until retirement, and more than one-third are so frustrated that they have given very serious consideration to resignation in just the last year.

What should a Chairman be? This concerned me deeply over sixteen years ago, when I first assumed a Chair. And it concerns me even more now. I believe a Chairman should be an

effective leader, with a broad knowledge of clinical medicine, and with high standards of quality. The Chairman has three major roles: (1) setting a tone, and that means continuing to be a scholar, a good clinician, and teacher; (2) performing the leadership role in recruiting. (My aim in recruiting is to attract people who are better than I am.) (3) The Chairman should be most critically concerned with facilitating the accomplishments and development of others, ie, he needs to *enjoy* basking in reflected glory. Without consideration of the qualifications of any particular person, but certainly including myself, I am concerned with the forces operating to make it difficult to meet these standards. I have already discussed the economics, the turmoil, the complexity, the planning activities, the committee business, the curriculum work, the national scene, and the time and energy spent in administration to get things accomplished and maintained on a day to day basis. These time demands are enormous, and make the Chairman highly vulnerable to being consumed and devoured by administrative functions. And I have read from the Braunwald report, and I believe it. As I indicated, I do not profess to have the solution. But we are moving in our department in the direction not only of shared and delegated responsibility, but also shared *authority* in administration. I see that as a central issue. We have a commitment to simplification of all our lives or at least our reaction to stress. I define crisis as (1) a patient is perceived as needing me or (2) my family needs me. I see only rare exceptions to this definition; administrative matters, although commonly painful, are rarely of crisis nature. In any event, perhaps sanity, clinical skill and scholarship, to whatever degree present can be preserved.

ADMINISTRATIVE ORGANIZATION

The goals of our organizational arrangements are to: (1) serve and facilitate the professional functions; (2) have realistic, broad participation; (3) simplify our lives; and (4) preserve the faculty including the Chairman as professionals. The premises upon which our structure is designed are: (1) The Chairman cannot do it all adequately; (2) Responsibility cannot effectively be shared or delegated without commensurate authority; (3) The Section Heads are obviously central to a successful department but because of the obligations inherent in their roles as Section Heads, they cannot

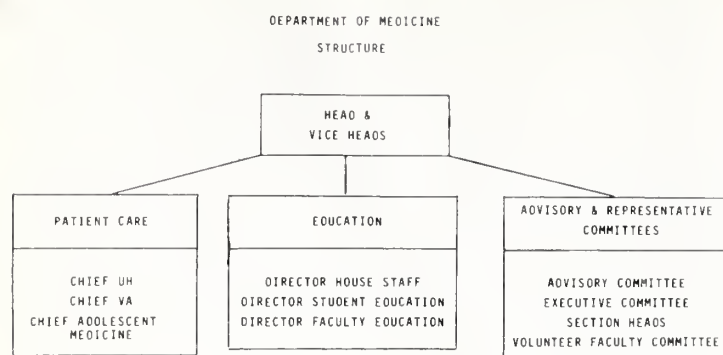


Figure 2: Outline of the administrative structure of the Department of Medicine at the University of Oklahoma Health Sciences Center.

be regarded as comprising an Executive Body. Nonetheless the importance of their role must be acknowledged; (4) The Executive Committee should be a combination of appointed and elected people who are concerned with all major administrative directions including fiscal matters; and (5) Students and House Officers should have representative access to their respective educational programs. Briefly, we have two Vice-chairmen, one who serves as Chief of Medicine at University Hospital and the other who serves as Chief of Medicine at the Veterans Administration Hospital. This gives each of our two central hospitals high level representation in the College Department of Medicine. It also places the two hospitals on an equal level, not only by the equal academic status of the two chiefs, but also because the Chairman is himself not a chief of service. The latter also preserves some of the Chairman's time and gives greater attention by one person to the complexities of directing a clinical service.

Figure 2 is an outline of our structure and Table 1 enumerates the composition of the Executive Committee.

FUTURE PLANS

We have outlined our aims and goals and some of the people and systems organized to implement these. We will continue to state that our major goal is *humane scholarship*, which is best expressed in the form of quality medical care. The student and house officer can hardly be expected to make it their major goal unless the Department regards it in that light. In addition, we are forming a group of faculty, house staff, nurses, student, and chaplain to be concerned entirely with the human needs of

our patients and their families. Quality care is served by, and in turn nurtures teaching and research. All of our planning for the future is directed with this theme in mind. I have already alluded to some examples under way. For example, we are making quite specific plans for a chronic illness program designed to improve the quality of life for affected people. We have begun an educational program for and by the faculty under the aegis of a Director of Faculty Education. In addition to monthly faculty seminars, this program includes local "mini-sabbaticals" of 2-4 weeks annually spent in other sections within the department and *annual* educational (not administrative) retreats in Norman, Oklahoma. Our first retreat was a review of general medicine, taught by and to the faculty. It was both a marvelous learning experience and enjoyable. We shall continue to nurture our professionalism for our own sake as well as for those we teach. In addition to these programs under way, we are continuing to develop and modify relations with other institutions and other departments. In addition to good programs in postgraduate education, we are beginning to explore some ideas in this area. Consideration of these and similar matters, along with the development of new special fields of knowledge should add some zest to our future.

FACILITIES AND RESOURCES

We are fortunate in Oklahoma to have generally excellent physical facilities. As they relate to Medicine specifically, we look forward

DEPARTMENT OF MEDICINE EXECUTIVE COMMITTEE

HEAD
VICE HEADS
DIRECTOR HOUSE STAFF
DIRECTOR STUDENT EDUCATION
DIRECTOR FACULTY EDUCATION
RESEARCH COORDINATOR
SECTION HEAD REPRESENTATIVE
VOLUNTEER FACULTY REPRESENTATIVE
PROFESSOR - ELECTED BY RANK
ASSOCIATE PROFESSOR - ELECTED BY RANK
ASSISTANT PROFESSOR - ELECTED BY RANK

Table 1: The composition of the Department of Medicine Executive Committee.

to improved facilities — many of these seem forthcoming.

Many, if not most schools in the United States go through cycles, ie, periods where they are very productive and stable, and other times when despair and hopelessness seem to permeate the atmosphere. It seems to me that the University of Oklahoma is currently in a very favorable position for further progress. There has been an increase in funding in the basic science departments, the University Hospital has improved greatly and has made commitments in particular to the Department of Medicine that allow *us* to advance together. The Veterans Administration Hospital has been a great source of strength to this department for many years, and that continues. Several community hospitals are interested in developing further their participation. The College of Medicine and the Health Sciences Center have recognized the deficiencies in staffing in the Department of Medicine, and have made increased commitments to us. These will not be enough to do what most of us want, but the first step is to define the limitations, estab-

lish priorities in our plans and limit programs, rather than quality in accordance with our resources.

In closing, I wish to share with you four personal reflections based on my past years as well as my brief period in the Chair at the University of Oklahoma. First, although I cannot guarantee a good future, I do commit my very best effort. Second, in general, my mistakes have been generously tolerated: I hope that will continue to be the case. Third, I respect anyone in academic medicine who accomplishes anything, any time and any place. Finally, the University of Oklahoma and its Department of Medicine have a past in which everyone can take pride. I cherish the past and all that has been good in the history of our school. However, the past should be used as foundation and a base of experience, not as a crutch. To live with the past is to become part of the past. For me, I am concerned primarily with the quality of the present and the future. It should be exciting. I ask all of you to help and join me in that future.

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MEDICAL EDUCATION CENTER**

and

**THE UNIVERSITY OF OKLAHOMA
HEALTH SCIENCES CENTER**

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The Veterans Administration, South Central Regional Medical Education Center
The Department of Medicine, Office of Continuing Medical Education for Physicians, University of Oklahoma College of
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News From The Oklahoma State Department of Health

Information About Oklahoma Public Health Dental Activities

The overall goal of the dental health service is to improve the dental health of the citizens of Oklahoma. In keeping with this goal, the dental health service conducts programs of (1) dental health education, (2) prevention of dental disease, (3) dental care for needy children and (4) consultation and research activities.

The dental health educational program consists of classroom talks to children and workshops and seminars involving preventive dentistry for school teachers, nurses and others involved with children's health. The preventive program emphasizes the promotion and control of water fluoridation, plaque control and topical fluoride applications for dentally indigent children. Fluoridation consultation and feasibility studies are provided to interested communities and regular inspections are made of water plants in cities with fluoridated water supplies.

Dental care programs are comprised of dental screenings, referrals to privately practicing dentists for many children found to need dental care and limited restorative care for dentally indigent children.

Dental diseases are certainly the most prevalent health problem in Oklahoma. Ninety-five to ninety-eight percent of the state's population are affected with one or more forms of dental disease. These diseases include dental caries periodontal disease, oral cancer, malocclusion, and cleft lip and cleft palate. Dental caries, is the number one health problem among Oklahoma's children. The average elementary school-age child in Oklahoma has four decayed teeth at any one point in time and periodontal disease is the primary cause of tooth loss among adults.

Today, with the knowledge that we have to present in educational programs, plaque control programs, and fluoridation programs, we have powerful preventive procedures which are effective, relatively inexpensive, and have the approval of medical and public health groups throughout this country. By following these preventive measures, the incidence of dental disease can be dramatically reduced. Of course, this is what we in Oklahoma are endeavoring to do with our public health dental program. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MAY, 1978

DISEASE	May 1978	May 1977	April 1978	Total To Date	
				1978	1977
Amebiasis	3	3	5	15	9
Brucellosis	—	1	—	1	1
Chickenpox	—	112	—	—	885
Encephalitis, Infectious	1	1	3	8	7
Gonorrhea (Use Form ODH-228)	1196	1043	946	5212	5126
Hepatitis, A, B, Unspecified	57	48	92	327	366
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	3	1	5	16	6
Meningitis, Aseptic	2	1	7	21	11
Mumps	—	59	—	—	440
Rabies in Animals	28	21	32	99	147
Rheumatic Fever	—	—	—	—	1
Rocky Mountain Spotted Fever	8	15	—	11	30
Rubella	—	3	6	10	26
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	3	4	1	11	51
Salmonellosis	34	36	18	83	84
Shigellosis	33	3	55	115	17
Syphilis, Infectious (Use Form ODH-228)	3	7	9	42	34
Tetanus	—	—	1	2	—
Tuberculosis, New Active	27	22	28	142	148
Tularemia	—	—	—	—	3
Typhoid Fever	2	—	—	2	—
Whooping Cough	—	—	1	6	3

Our Federation: Stronger Than Ever

by

Tom E. Nesbitt, MD, President,
American Medical Association.

Editor's Note: Oklahoma-born Tom E. Nesbitt, MD, was inaugurated President of the American Medical Association during a recent meeting in St. Louis. In his inaugural address Dr Nesbitt addressed the issue of rising health care costs, recommended ways physicians can help accomplish this, and admonished the Administration for its inconsistent attempts to deal with this issue and its recent attack on the profession. The Journal is pleased to be able to present the following address by AMA President Dr Tom E. Nesbitt.



Tom E. Nesbitt, MD

I begin my formal remarks this evening by assuring you that I have given a great deal of time and thought to this, my first message as President of the American Medical Association.

I thought of the high honor that election to this office signifies, and I extend to you my sincere gratitude for that honor.

I thought of the heavy responsibilities that the coming year will bring in this time of ordeal, and opportunity, for American medicine.

And I extend to you my promise to do my utmost to help fulfill those responsibilities.

I also thought about, and summoned up the fortitude to talk about, what to my mind is the most imposing challenge for physicians today. I'm referring to the need for individual physicians, in their own private practices, to voluntarily restrain the rate of professional fee increases.

I'm well aware that historically, any discussion of the individual physician's right to determine professional fee levels has been all but forbidden ground for an officer of the AMA.

Despite that fact, I'm going to make this request a focal point not only of this inaugural, but also a focal point of my message to America's physicians during the coming year. And while this message will be informal to the extent that it calls only for voluntary responses by individual physicians, there are some very compelling reasons why physicians should comply.

If certain proposals now in the Congress are enacted, for example, the forbidden ground of

professional fees will become a playground for legislators, economists, health planners, consumerists, and whomever.

I refer, of course, to the legislative proposals which would impose arbitrary revenue restraints on hospitals, and perhaps extend such restraints to private practice, as some have proposed; if these proposals are enacted, then we can forget all the rhetoric about issues such as health planning guidelines and national health insurance.

Because if government controls over hospital revenues and professional fees are added to existing controls arising from government's substantial health insurance financing commitments, then for all practical purposes government will, in fact control the quality, and the quantity (in terms of access), of the medical care system as a whole.

In short, the rationing of care, ala the British National Health Service, will be imposed on America. And while recent polls show that a majority of Americans favor national health insurance, they are against a national health service — financed through higher taxes and controlled by Washington.

To preclude such an eventuality, however, the private sector must provide effective voluntary alternatives, including cost control alternatives.

And — as an officer of the AMA and a practicing physician — concern for the future of our profession prompts me to ask individual physicians, too, to demonstrate their sincerity by restraining the rate of professional fee increases.

Parenthetically, I believe that asking for such voluntary restraints by physicians is as reasonable as it is pivotal.

It is reasonable because of the recent opinion polls which show that a majority of physicians, along with a majority of the general public, agree that the major health care concerns in our society today revolve around the cost issue.

It is reasonable because I am not — I repeat, I am not — asking each physician in this country to suddenly make an across-the-board reduction in specific fees for specific professional services.

We physicians, after all, are not exempt from the hard realities of today's economy. We, too, are subject to higher overhead costs due to factors such as rising prices for heating fuel and medical supplies, employee wage increases and

the general inflationary spiral; and these added costs necessitate periodic increases in our professional fees.

What each of us can do, however, is place realistic restraints on the rate of these periodic escalations, realistic in terms of allowing us to cope with the effects of inflation while maintaining the quality of patient care.

This request is reasonable because it is asking no more of individual physicians than what we are asking of other components of the medical system. If we expect hospitals to reduce their rate of spending increases by two percentage points in each of the next two years, for example, then it is proper for us to demonstrate our own sincerity and good faith by moderating our fee escalation rates.

I should add that for most of us, the resulting financial difference itself would be moderate since it would be merely an extension of an already existing downward trend in the rate of professional fee increases.

Evidence of this downward trend is provided by the Consumer Price Index (or CPI) of the US Department of Labor which reveals that the rate of increase in physician fees has been declining since 1975.

The CPI does show that during the year immediately following the end of federal price controls (between May of 1974 and May of 1975), physician fees increased 13.2 percent. But the "catching up" associated with the end of price controls has substantially moderated since then.

During 1977, for example, the rate of increase in physician fees was 9.2 percent, or 4 percentage points less than the rate for the 12-month period ending in May, 1975.

For purposes of comparison, and using the same time frames, increases in the "all items" component of the CPI dropped from 9.5 to 6.8 percent.

In short, if each physician can moderate annual fee increase rates by just one percent in each of the next two years, our fee escalation rate would be close to the "all items" rate — perhaps even under it if recent all-items price increases continue.

So by merely extending an existing trend, we can provide ourselves with a very visible — and extremely persuasive — argument in our struggle to preserve our pluralistic medical care system, which emphasizes voluntary problem-solving by the private sector.

The most formidable challenge by far facing American medicine in the coming months and years will be to deal forcefully with the cost problem which, in the final analysis, means forceful action by each physician.

In that respect, my request for professional fee restraints may be unreasonable to the extent that many physicians simply don't know how to moderate the costs of medical practice . . . and hence their fees. In this regard, there is a wide variety of possible approaches.

For example, the AMA will sponsor 202 practice management workshops across the nation this year. Offering sound advice on improved efficiency and productivity in medical practice, it is estimated that increased office efficiency alone can reduce practice costs by as much as 5 percent.

Other possible answers have been suggested by the National Commission on the Cost of Medical Care. Certainly their recommendations already have been given considerable attention at this Annual Convention.

Basically, the Commission stresses the importance of participation by individual physicians in local cost moderation efforts, many of which are applicable to the physician's office, as well as to the hospital.

Local peer review and utilization review programs are cases in point. Reasonable guidelines for medical care, based on necessity as well as quality, can help reduce costs. But only if individual physicians participate in, and abide by, the development and dissemination of these guidelines.

Of course, the real medical needs of patients must continue to receive the highest priority, whether in the hospital or in our offices.

Nevertheless, rough guidelines for determining the necessity and appropriateness of medical care can serve as a rough yardstick for individual physicians in assessing patient needs before, and after, hospitalization.

Furthermore, other segments of our society (notably government and the public-at-large) have to be more responsible in their approaches to cost moderation — with the emphasis on "responsible."

Certainly the Carter Administration's proposal to slap a flat, arbitrary limit on hospital revenues would be irresponsible.

By contrast, in my view the current Voluntary Effort is responsible. While on this sub-

ject, one cannot help but speculate as to the motivation, and hypocrisy, behind a recent decision by the Carter-Califano team. I'm referring to their specious decision to call for voluntary restraints by industry on the one hand, while attempting to sabotage our own Voluntary Effort on the other hand, by asking the Justice Department to not grant us an exemption from potential anti-trust action.

Apparently, some people in government are determined to ignore the irrefutable fact in medicine, namely that we cannot provide high-quality care to patients for less than its basic cost.

Meanwhile, our society must somehow persuade Americans that more healthful lifestyles can do more to reduce medical costs than all other efforts combined. We will take a step in that direction next month at the Joint Conference on Positive Health Strategies developed by the AMA and Senator Kennedy.

It will be my privilege to join the Senator in co-chairing the Conference, which will be held July 25th through the 27th in Washington, DC.

The Conference itself, co-sponsored by 12 other national organizations broadly representative of our society, will focus on positive health strategies for schools, communities and the work place . . . as well as possible health action programs for the future.

But, to me, the Conference also demonstrates that representatives of the private and the public sectors can put aside their differences, and in mutual good faith seek practical solutions to real health care problems.

This is in stark contrast to the reprehensible attitude recently displayed by President Carter when he attacked the professions and private institutions, including lawyers, physicians and the AMA.

In a letter of response, the AMA reminded Mr. Carter of this Association's manifold accomplishments in promoting good health and high-quality medical care for the American people. Our response also deplored the questionable logic of impugning the good faith of physicians at a time when mutual action by the public and private sectors are so essential to the resolution of problems.

The White House also was struck by some well-placed editorial shots from the news media. The *Washington Post* took special aim at the President's seeming reluctance to "let

doctors organize into the AMA." In a lead editorial the *Post* emphasized that, "The verb 'let' has an unwholesome connotation as though the right to organize could be extended or revoked as someone saw fit."

I believe the *Post's* analysis might be extended by reminding Mr. Carter that America is built on democratic principles, with a small "d."

Not the least of these principles is that strong, vigorous private associations serve as a check, and a balance, against the unreasonable growth of government and the unreasonable exercise of power and arrogance often attached thereto.

Therefore, it seems to me that rather than make gratuitous attacks on private sector professions and institutions, the President would be better advised to devote his energies to more constructive pursuits — including the thus-far futile pursuit of his own campaign promises.

But if it's a fight that Mr. Carter wants then it's a fight he'll get!

Because we physicians are well advised to continue our struggle to avoid the pitfalls inherent in governmentalized medicine. For example, during recent AMA-sponsored trips to study health care systems in Europe and the Far East, these pitfalls truly became apparent.

Any government-enacted and government-dominated health care insurance program inevitably results in significant reductions in the quality — and ultimately the quantity — of medical services available to patients.

And this reduction may have several manifestations such as cutbacks in research, detrimental changes in the curricula and length of training of physicians, and diminished quality in terms of a non-availability of the modern medical technology that Americans have come to take for granted. The upshot of all this would be a reduction — or rationing — in the quantity of medical services available to patients.

This is evident in Great Britain; it is dramatically illustrated in the People's Republic of China; and it is currently being confronted as a crucial issue by the Medical Associations of Japan and Australia.

And, of course, it has obvious implications for the "Great Health Care Debate" here in our own country. In all areas, not just in medicine,

our society — like other societies — is facing the difficult task of seeking an accommodation between the virtually unlimited wants and needs of individual citizens, and the limited resources — financial and otherwise — available to fulfill those wants and meet those needs.

It should be obvious that every physician shares in the responsibility to help our society make the right choices.

Both as individual practitioners, and as a profession made strong through this medical federation of ours, we must help fashion practical, effective answers to problems, with no little emphasis on voluntary answers to cost problems.

I say all this knowing full well that we can be discouraged by the difficulty of reaching a consensus on the right choices even among ourselves, much less a consensus with other segments of our society including government.

The adoption of new policies, after all, often creates disagreement both within and without the profession, as the Delegates at this Annual Meeting can attest.

We can also be discouraged by those critics who insist that this Association is a doddering, debilitated relic of the past. Well, I have a couple of appropriate, closing quotations which offer large measures of reassurance.

The first one pointed out:

"Doubtless each member of the House has an opinion . . . on each of the various issues which may be considered at this Session of the House. It is reasonable to expect these opinions to conflict to some extent when we think of the wide variations in the local problems (of) various communities throughout the country."

That statement was made 40 years ago by Dr Harrison Shoulders, who was then Speaker of the House, and who subsequently preceded me as an AMA President from Nashville, Tennessee.

The second quotation goes like this:

"It is no secret that there has been an attempt in various places to lead the American people to believe that the (AMA) is not representative of the American medical profession, that it is a weakened, disrupted, failing organization."

And yes, that statement, too, is 40 years old, made in 1938 by Dr Irvin Abell, then President of the AMA.

For decades, then, critics have been greatly exaggerating the death of the AMA; and the

reason they do so is that to impose their own social views on the public, they must first seek to discredit their strongest rivals. And this federation of ours is much stronger in 1978 than it was in 1938.

It is stronger in its support for continued rivalry between the public and the private sectors, which is healthy for democracy as a whole.

It is stronger in terms of its pragmatic policies, programs, and proposals to deal with contemporary health care problems.

It is stronger as both protector, and promoter, of American medicine's superb, healing quality in medical education and practice.

And it's squarely up to you, and me, and every physician in this country worth the name to keep it that way!

You have my unqualified pledge to disseminate these truths during the coming year. □

AMA Position on Bacche

The American Medical Association issued the following statement in response to the Supreme Court ruling in the case of the Regents of the University of California vs. Bacche. Dr

C. H. William Rhue, senior vice-president of the American Medical Association, served as AMA spokesman.

"The American Medical Association has long been in support of programs designed to increase minority representation in medical schools and in the practice of medicine. This position was reaffirmed last week in St. Louis at the Association's annual meeting through acceptance of a manpower report of the AMA Council on Medical Education. The report addresses the issue of 'black and other minority group physicians' with the opening statement: 'The inadequate representation of minority groups in the medical profession and in medical school enrollment remains of concern to the AMA.'

"The Supreme Court ruling seems to permit medical schools to continue using race as one factor in determining admission criteria. We hope that medical schools will, therefore, continue to use those elective admissions programs designed to increase the numbers of minority students. It is only through these types of programs that we can hope to increase the numbers of minorities in the practice of medicine." □

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Oklahoma Doctors Named Officers of Surgical Group

Oklahoma City physician, Dr Jack A. Barney, was re-elected recently Secretary-Treasurer of the Southwest Surgical Congress. Elected Counselor for Oklahoma is Dr Ronald C. Elkins of Oklahoma City. Elected vice-counselors for the state are Dr Frank A. Clinigan, Tulsa; Dr William McCurdy, III, Norman; Dr Harris J. Moreland, Bartlesville; and Dr Richard E. Witt, Tulsa. □

Pharmacists Oppose HMO's

During the recent meeting of the Oklahoma Pharmaceutical Association the pharmacists in this state went on record as opposing establishment of Health Maintenance Organizations (HMO's). In a unanimously approved resolution, the state's pharmacists said HMO's have proven to be extremely costly and have been neither successful nor profitable. The resolution called upon the OPA to protest the spending of public money on these projects and encouraged the use of the private enterprise

system to improve the delivery of health care.

In other action the OPA also passed three other resolutions unanimously which have direct bearing on physicians. One resolution encourages that prescribers of medications in hospitals be required to print or stamp their names and drug enforcement administration numbers on the prescription order in addition to signing it. According to the OPA, many prescriptions are presented without the imprinted name of the physician and it is impossible, or at least very difficult, to identify the physician if there are questions.

Another OPA resolution opposed the prescription of multiple medications on one prescription blank. Pharmacists say this causes problems for the patient, pharmacists and physicians as well as creating administrative difficulties.

A fourth resolution opposed regulations requiring the dispensing of patient package inserts with each prescription. The OPA said this was costly in terms of printing, storage and distribution, and that the majority of patients are not interested in the insert information. The OPA voted to oppose these requirements "until practical, simple, understandable, worthwhile information is developed." □



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Physician Comment Sought on Changes in Ethics Code

The AMA's Judicial Council is seeking comment from physicians regarding proposed changes in the AMA's Principles of Medical Ethics. The proposed amendments to the ethics are intended to modernize the language and to clarify their meaning. The changes were considered by the AMA House of Delegates at the Annual Convention in June, 1978, in St. Louis. The following are both the present principles and the proposed new version of the ethics code.

Present Principles of Medical Ethics

Preamble. These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

Section 1. The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man.

Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 2. Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

Section 3. A physician should practice a method of healing founded on a scientific basis; and should not voluntarily associate professionally with anyone who violates this principle.

Section 4. The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

Section 5. A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability.

Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6. A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

Section 7. In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interest of the patient.

Section 8. A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

Section 9. A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Section 10. The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

Proposed New Principles of Medical Ethics

Preamble. These principles are intended to aid physicians in maintaining high standards of ethical professional conduct in their relations with patients, colleagues, members of allied professions, and the public.

One. The primary objective of the medical profession is to serve patients competently with full respect for their dignity.

Two. Physicians should strive continually to

improve medical knowledge and skill and to make available to patients and colleagues the benefits of their professional attainments.

Three. A physician should not engage or participate in treatment which is not founded on a scientific basis.

Four. The medical profession should protect the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of their profession, and voluntarily accept its self-imposed disciplines. Physicians should expose, without hesitation, illegal or unethical conduct of members of the profession.

Five. Physicians may choose when they will serve except in emergencies. Competent services should be provided and continued until the physician is discharged or services are discontinued after giving adequate notice. A physician should not attempt to obtain patients by deception.

Six. Physicians should resist restraints which interfere with medical judgment and skill or cause deterioration of the quality of medical care.

Seven. Physicians are entitled to be compensated fairly for personally providing or supervising the medical care of patients. A commission should not be paid nor accepted for the referral of patients.

Eight. A physician should seek consultation upon request or whenever it may benefit the patient.

Nine. A physician may not reveal confidences entrusted during medical attendance or deficiencies observed in the character of patients, unless required to do so by law or it becomes necessary in protecting the welfare of the patients or the community.

Ten. In addition to providing care to patients, the physician has a social responsibility to participate in activities intended to improve the health of the community. □

Last Chance Diet Called Dangerous

The "Last Chance Diet" of liquid protein-supplemented fasting to lose weight is dangerous and should not be used, declares an editorial in the July 14 *Journal of the American Medical Association*.

"There are safer alternatives to the liquid protein diet that are equally effective and nutritionally more rational. But, in any case, no drastic weight reduction regimen makes sense unless adequate provision is made for subsequent maintenance of weight loss," says Theodore B. Van Italie, MD, of St. Luke's Hospital Center, New York City.

"It is simply not possible to ignore the growing indications that prolonged use of the liquid protein diet is hazardous and potentially lethal," says Dr Van Italie.

Officials of the Food and Drug Administration and the Center for Disease Control are currently investigating 46 deaths associated with the use of liquid protein diets, the editorial points out.

"These unnecessary deaths are a somber reminder of the tragic consequences that can occur when therapy outstrips its research base. It appears that the liquid protein materials were never tested in appropriate laboratory animals to determine their safety for prolonged use for weight reduction."

The editorial accompanies two scientific reports of a total of three deaths among four female patients who had adhered faithfully to a liquid protein diet for five to six months. Heart problems caused the deaths.

Capt. Jerry M. Brown, of William Beaumont Army Medical Center, El Paso, Texas, and colleagues report on the death of a 34-year-old woman who had lost 88 pounds in five months. Capt. Brown concludes: "Strict protein-sparing modified fasting is not without risk of sudden death even with close medical supervision." □

Governor Boren Announces Four Workers Compensation Judges

Governor David Boren recently named four judges to fill judicial positions on the new Workers Compensation Court. Judge Chris Sturm was designated as presiding judge.

Boren appointed Charles L. Cashion and Marian P. Opala of the present five-member Industrial Court to the new seven-member court, along with Mary Elizabeth Cox, attorney for the state Insurance Fund, and Patrick Ryan, administrator of the Department of Consumer Affairs. □

New Technique Stretches Shortened Human Fingers to Normal Length

A Washington, DC, hand surgeon says he has developed a technique by which shortened fingers can be stretched to normal length in hands which previously could not have been reconstructed.

Some of the shortened fingers are caused by birth defects and others by amputation accidents, says the report in the July 14 *Journal of the American Medical Association*.

The new "distraction" or stretching technique triples or quadruples the amount by which digits (or entire hands) can be lengthened without appreciable loss of sensation, says, Norman J. Cowen, MD, chief of hand surgery at Georgetown University. At the end of treatment patients can begin to use their hands for grasping and other normal functions.

Distraction in hand surgery means separating the joint surfaces and stretching the joint without tearing the binding ligaments and nerves.

Like other distraction techniques, Dr Cowen's approach makes use of bone grafts after some stretching of the skin, nerves, blood vessels, and whatever bone already is present in the deformed area.

"But the stretching far exceeds the lengths previously thought possible," says Dr Cowen, who believes the technique holds special promise for some congenital hand defects.

The method has evolved since September, 1975, when Dr Cowen began using a distraction device designed by a Tel Aviv physician, Isidor Kessler, MD. Dr Cowen modified the apparatus. The finger is, in effect, stretched on a small rack with the turn of a screw. Each advance is only one millimeter (one 25th of an inch.)

"The key is that you stretch gradually, not faster than the nerves can regenerate," says Dr Cowen.

Patients who lack sufficient bone in the area for lengthening first undergo bone grafts from the toes to the hand. After the distraction device has stretched the fingers and hand to the desired length, Dr Cowen fills in the gaps (created by distraction) with bone grafts.

One violinist whose thumb on the left hand was amputated by a high voltage injury is now able to play the violin again. □

Free Health Educational Literature Available

The Oklahoma-National Foundation/March of Dimes has free literature available pertaining to prenatal care, nutrition, alcohol and drug use during pregnancy, genetic counseling, and the general health of the pregnant woman. Doctors are welcome to contact the following March of Dimes offices for catalogues showing free literature available and films for loan:

National Foundation March of Dimes

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6051 North Brookline, Suite 111
Oklahoma City, Oklahoma 73112
Phone — 405 848-4631

Eastern Oklahoma
2651 East 21st, Suite 104
Tulsa, Oklahoma 74114
Phone — 918-742-7323 □

BOOK REVIEW

WATSON-JONES FRACTURES AND JOINT INJURIES, Edited by J. N. Wilson, Edition 5, 1372 pages. \$95.00, New York. Churchill-Livingstone 1976.

This is the fifth edition of this standard work. As with the previous editions, the book remains a two-phased approach to the management of traumatic disorders. The first volume is directed generally to principles, and the second volume is designed as a regional atlas of injuries that will be more useful for immediate reference.

Volume I contains new sections on the systemic effects of injury, on head injuries and injuries to the chest and abdomen. Although seven chapters in Volume II are listed as having been revised and one newly written, others are reproduced with only minimal readjustment of text and illustrations.

The present volumes will certainly find their way into most orthopedic libraries. Volume I can certainly be recommended as still retaining most of Watson-Jones' original flavor. Unfortunately, Volume II has not been adequately revised. *Harris D. Riley Jr., MD*



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The following continuing medical education offerings have been submitted by the sponsoring institutions as having been approved by the AMA for credit in the Physicians Recognition Award. It is suggested that you contact the sponsoring institution for information concerning the exact number of credit hours and the exact category credit available.

Date	Time	Subject	Place
August 24	12:00 noon	Tumor Board	Hillcrest Medical Center, Tulsa
August 25	12:00 noon	Hematology-Oncology Conference	Hillcrest Medical Center, Tulsa
August 28	7:00 a.m.	Medicine Teaching Conference	Baptist Medical Center, Oklahoma City
August 28	12:00 noon	Nephrology Conference	Hillcrest Medical Center, Tulsa
August 29	12:00 noon	Raid Rounds	Hillcrest Medical Center, Tulsa
August 29	5:00 p.m.	Cardiac Catherization Conference	Hillcrest Medical Center, Tulsa
August 30	7:30 a.m.	Current Concepts in Diagnosis of Non-Hodgkins Lymphomas	South Community Hospital, Oklahoma City
August 31	12:00 noon	Tumor Board	Hillcrest Medical Center, Tulsa
September 1	12:00 noon	Hematology-Oncology Conference	Hillcrest Medical Center, Tulsa
September 5	12:00 noon	Cardiology Conference	Hillcrest Medical Center, Tulsa
September 6	7:30 a.m.	Emergency Medical Services	South Community Hospital, Oklahoma City
September 8	12:00 noon	Hematology-Oncology Conference	Hillcrest Medical Center, Tulsa
September 8	12:30 p.m.	Tumor Board	South Community Hospital, Oklahoma City
September 9		Symposium on Antibiotics and Infectious Diseases	Hotel Mayo, Tulsa
September 11	12:00 noon	Nephrology Conference	Tulsa Rehabilitation Center, Gold Room
September 12	12:00 noon	Raid Rounds	Hillcrest Medical Center, Tulsa
September 13	7:30 a.m.	Renal-Vascular Hypertension	South Community Hospital, Oklahoma City
September 15, 16	8:30 a.m.	*Eye Seminar Workshop	South Community Hospital, Oklahoma City
September 15	12:00 noon	Hematology-Oncology Conference	Hillcrest Medical Center, Tulsa
September 18	12:00 noon	Nephrology Conference	Tulsa Rehabilitation Center, Gold Room
September 19	12:00 noon	Cardiology Conference	Hillcrest Medical Center, Tulsa
September 20, 21, 22		**Problem Solving in Trauma	Sheraton-Skyline East, Tulsa
September 20	7:30 a.m.	Asthma-Immunology, Etiology and Therapy	South Community Hospital, Oklahoma City
September 22	12:00 noon	Hematology-Oncology Conference	Hillcrest Medical Center, Tulsa
September 22	12:30 p.m.	Tumor Board	South Community Hospital Oklahoma City

* Fee Required—Send Inquiries to Dr Little, South Community Hospital

**Fee Required—Contact Tulsa Medical College

Damned or Divine?

Recently the American Society of Internal Medicine (ASIM) endorsed — barely — the policy of charging professional fees for services rendered via the telephone. The vote for endorsement was no landslide. Many members of the ASIM group, struggling as much with their consciences as with the realities of the twentieth century, opposed the sanction.

How any physician can resist the propriety of charging for his professional services, regardless of how, when or where they are rendered, is difficult if not impossible to understand. And the telephone provides a particularly noxious and dangerous vehicle for the delivery of medical care. It is preemptive, inconsiderate, intrusive and demanding. It devours leisure, prohibits the continuity essential to constructive endeavor, infringes upon the rights and senses of everyone in its proximity and destroys the blessed haven of silence. If sane, adult human beings behaved as telephones do, they would be friendless and unwelcome everywhere. To accept them as trivial accoutrements or benign conveniences sometimes employed in the practice of medicine is unthinkable.

Also unthinkable is the opinion, held by many physicians, that services rendered via the telephone are not worthy of a fee. In defending such a view they frequently resort to such non sequiturs as "We charge them enough as it is — the telephone calls are included — part of the obligation we assume — I tell them to call — my patients would go elsewhere — they'd refuse to pay for them and then think up some reason to sue me." Not one of these points is valid or logical. No charges for direct-contact professional services can be sufficient to compensate the physician and his office staff for the time and liability involved in handling telephone calls. In order for such assurance of remuneration to obtain, the fee for a single office visit involving twenty minutes of physician-patient contact would, in many cases, need be large enough to cover the costs of retrieving and refiling, posting and handling the patient's chart as many as ten times and at least twenty additional minutes of the physician's time. Obviously no fee based on tenuous contingencies can be fair or reasonable. Furthermore telephone

calls are frequently substituted for office visits, thus obviating the opportunity to charge an equitable fee. Consequently, patients who come to the physician's office must pay for those who only call.

Equally invalid is the protest of the physician who refuses to charge for telephone calls which he solicits from his patients. Unless, of course, the same physician would make no charge for a return visit which he recommended as an essential part of good medical care.

Professional liability is neither avoided nor compromised by the circumstances of communication. Advice transmitted by telephone carries the same responsibilities as that rendered in person. And the potential for committing serious errors in advising a seldom-seen patient who calls the physician at home when he does not have convenient access to the patient's record is much greater than usual. If part of the professional fee relates to the assumption of liability — as it properly should — the charges for telephone consultations should be greater than for office consultations, certainly not less.

Then there is the matter of the patient's right to know, the currently popular — and proper — direction of today's consumerism. Until his physician's statement reveals the number of phone calls made by him or his pharmacist, whether a charge or no charge is added, no patient will ever know how much time and attention is devoted to his care. The appearance of twenty entries for telephone calls made between office visits shown on an itemized bill has a considerable impact on most patients' attitudes concerning the use of their physicians' telephones.

If all physicians regularly charged fees for nearly all their telephone services the abuse of the instrument would eventually decline, insurance underwriters would be forced to consider reimbursement allowances, practicing physicians would lead happier, longer lives and spend less money devising ways to avoid answering the telephone. And slowly but certainly, the device would regain its stature as one of the miracles which God hath wrought.

MRJ

Guess what! The Oklahoma State Medical Association is getting into the business of making second opinion referrals. In the future, patients who don't know who to contact about a surgical second opinion may contact the OSMA and we will refer them to two or three qualified physicians. Sounds reasonable, doesn't it? Something we probably should have been doing all along. Well it is. Only now, HEW and the insurance industry have decided it is their idea and they are putting a national organization behind it.



Several months ago, HEW decided that there was entirely too much unnecessary surgery. As a surgeon myself, I must agree. Any unnecessary surgery is too much and I suppose that on occasions surgery is performed that is either unnecessary or at least questionable. At any rate, our Federal overseers in Washington, DC, got together and decided that the way to prevent this was to tell our patients that seeking a second opinion was perfectly reasonable. What they didn't tell them was that we have been doing this for years and that a system was already in place to accomplish this. But, since tax dollars don't really count, and since the people in Washington seem to have money to burn, they decided that the only way to fulfil this great new idea of theirs was to use a toll-free telephone number and to back the program with hundreds of thousands of dollars in paid advertising.

It's remarkable how good new ideas are when they really aren't new at all.

Then came a generic substitute. If second opinions are good, thought one insurance com-

pany, then second opinion panels must be even better. Suddenly there was a great deal of scurrying about as some rules about second opinion panels had to be agreed upon . . . minimum qualifications, prescribed functions, services which could be allowed, services which couldn't be allowed, payment mechanisms, etc. All of a sudden most of us couldn't decide whether we were for or against second opinions, a problem we had never had before.

I'm sure that the many editorials critical of the federal government which are written every day throughout the country must become redundant. I'm sure also, that authors who are responsible for more than a monthly President's Page must grow tired of writing about the obvious. But that's just the point . . . it is so obvious.

A bureaucracy makes a bureaucracy of everything it touches. In just a few months a second opinion system which the OSMA had had in effect for years was almost manipulated into something none of us could support. Both physicians and patients would have suffered as a result.

I wholeheartedly agree with the position taken by our Board of Trustees which generally supports the concept of second opinion consultations, but opposes the establishment of second opinion panels or any other system which would interfere with doctor-patient relationships. I support this position. I support second opinions when they are necessary. But I cannot support the federal government's desire to become involved in each and everything that we do.

Marvin K. Margo A.D.

The Vietnamese Emigre Physicians in Oklahoma From 1975 to 1977

A TWO YEAR REPORT

NONG THE ANH, MD
JAMES F. HAMMARSTEN, MD

When Vietnam fell in April, 1975, about 550 Vietnamese physicians came to the United States. Since then, the University of Oklahoma College of Medicine has assisted 154 physicians meet their educational needs. Currently, 74.2% are Educational Commission for Foreign Medical Graduate (ECFMG) certified and 90.9% have passed the medical portion of this examination. The English test portion is the major obstacle in achieving ECFMG certification. The most immediate problem is in finding internship positions for these physicians.

After the fall of South Vietnam in April, 1975, about 650 physicians came to the North American continent with approximately 550

physicians settling in the United States and 100 in Canada. This migration constituted the third time a large number of physicians had come to the United States under very special circumstances. The first occurred in the 1930's when 5,556 physicians came from Europe. To aid in their settlement, the Committee for the Settlement of Foreign Physicians, headed by Dean David L. Edsall of Harvard Medical School, was set up under the aegis of the non-sectarian National Coordinating Committee for Aid to Refugees. The achievements of this Committee have been reported in detail elsewhere.¹⁻³

In the early 1960's, 2200 Cuban physicians emigrated to the United States. These physicians were required to take the Educational Commission for Foreign Medical Graduates (ECFMG) examination and a state board licensure examination before being allowed to practice medicine in this country. The federal government provided money to help prepare them for these two examinations with the major effort of re-education being accomplished at the University of Miami.^{4, 5}

In 1975, the Vietnamese physicians, with a totally different culture, language, and medical education background, arrived in this country. In May and June of that year representatives of the medical profession in Oklahoma initiated efforts to gain federal support for a program to prepare these physicians to take the ECFMG examination, the first step in their

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entry into the American health care system. Doctor James F. Hammarsten, Professor and Head, Department of Medicine, University of Oklahoma College of Medicine prepared a proposal which, with the help of Mr. David Bickham, Executive Director of the Oklahoma State Medical Association, resulted in a meeting in July with representatives of the Department of Health, Education, and Welfare, under the auspices of Senator Dewey Bartlett. Doctor Malcolm Phelps, who had served as Field Director for the Volunteer Physicians for Vietnam Program in 1966 and 1967, and as Chief of the Health Division of the United States Agency for International Development for the Department of State from 1968 to 1974; and Doctor Nong The Anh, a Vietnamese medical graduate and a former faculty member of the Saigon Medical School, met with Senator Bartlett; Doctor Robert Knouss, Director, Division of Medicine, National Institutes of Health; Doctor Donald Wortman, Deputy Assistant Secretary for Program Systems, Department of Health, Education and Welfare; Doctor Robert Streicker, Director, Bureau of Medical Services at the Health Services Administration; and Mr. Fred Ruth, Legislative Assistant to Senator Bartlett. On July 31, the Secretary of Health, Education, and Welfare signed a memorandum authorizing 1.3 million dollars in special funds be made available to assist the Indochina Refugee physicians in preparing for the ECFMG examination. Contracts to organize and conduct an intensive preparatory course were awarded to seven medical schools: the University of Oklahoma; the University of Arkansas; the University of California, San Diego; the Hahnemann Medical College; the Loma Linda University; the University of Miami; and the University of Nebraska. The preparatory course in Oklahoma started in March, 1976, and ended in June, 1976. One year has elapsed since the implementation of this program and the spring of 1977 marked the second anniversary of the entry of the Vietnamese physicians into the United States.

This paper reports our two years' experience with the Vietnamese Emigre Physicians in Oklahoma. We will first briefly review the medical education which our students received in Vietnam, our educational program for the Vietnamese emigre physicians, an analysis of the problems of their adjustment in this coun-

try, and finally, some thoughts on the future of these physicians in the United States.

1. MEDICAL EDUCATION IN VIETNAM⁶

A very brief summary of the medical education in Vietnam is presented here. From 1910 to 1949 the only medical school in Vietnam was an annex of the Faculty of Medicine of the University of Paris, located in Hanoi. In 1949, another center, the University of Hanoi-Combined Faculty of Medicine and Pharmacy, Center of Saigon, was created as an extension of the Faculty of Medicine in Hanoi. However, in 1954-55, with the division of the country into North Vietnam and the Republic of Vietnam (South Vietnam) and the consequent evacuation of about one million North Vietnamese to the South, most of the faculty of the combined Faculty of Medicine and Pharmacy of Hanoi joined the center in Saigon. During the next two decades, two additional medical schools were founded in South Vietnam. The Faculty of Medicine at the University of Hue opened in 1961, with its first class being graduated in 1967. The Minh Duc Medical School, a private institution located in Saigon, opened in 1973.

Despite political change and educational growth in terms of the number of medical schools, there were no significant changes in the medical education curriculum. High school students who passed the National Baccalaureate Degree could enroll in a premedical year consisting of physics, chemistry and biology. After successfully completing the year, students underwent six years of medical education during which they studied basic sci-

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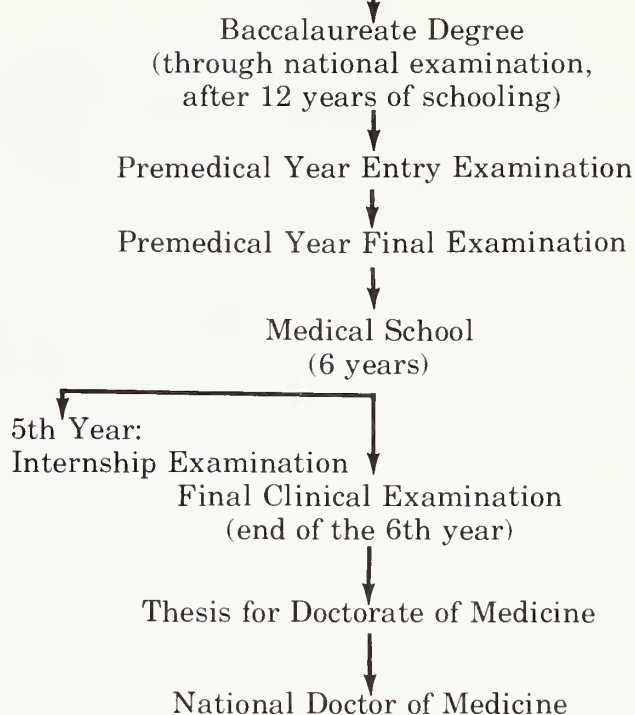
Certified by the American Board of Internal Medicine, Anh The Nong, MD, is a 1970 graduate of the Faculty of Medicine, University Saigon. He is presently Assistant Professor of Medicine at the University of Oklahoma Health Sciences Center. He is an associate member of the American Society of Internal Medicine.

ences, clinical medicine, served clinical clerkships, and some served internships. At the end of the sixth year, if they successfully completed a final examination and defended their thesis for the Doctorate of Medicine, they received the title of National Doctor of Medicine which allowed them to practice without further training.

The sole exception to the generalization of no significant change in Vietnamese medical education during its entire history occurred in 1962 when both matriculation procedures and curriculum underwent partial Americanization.^{7,8} A competitive examination was introduced to select students for the premedical year. As a result, only about 250 students instead of 800 to 1,000 per year were chosen from an average of 4,500 candidates. Another examination at the end of that year sanctioned entry into medical school of approximately 200 students. In addition, the medical curriculum was modified and at the same time up-to-date American textbooks became available. During the first two years students studied basic sciences and during the third and fourth years they attended clinical medicine lectures in the afternoons and served clerkships in the mornings. The fifth and sixth years were occupied by advanced clerkships or internships although lectures on medical and surgical therapeutics were given during part of the fifth year.

The internship deserves some special comment. The medical education system in South Vietnam closely followed that of France. Interns were recruited through a very difficult competitive examination given at the beginning or in the middle of the fifth year. Ten to fifteen percent of each class of students became interns through this examination process. They usually constituted what was called "the Nursery of the teaching staff of a medical school" and held the official title of "intern-of-hospitals." There were two other categories of interns. The first consisted of those who did not pass the internship examination but whose grades were within a certain range established by the internship-examination jury. These students were given the title of "provisional intern" and had the same responsibilities as the "intern-of-hospitals." They had to take and pass the internship examination again in the following year in order to be conferred with the title of "Intern-of-Hospitals." The second category of intern included those students who

TABLE 1
MEDICAL EDUCATION SYSTEM IN SOUTH VIETNAM
(1962 to 1975)



did not pass or did not take the examination for some reason, but who wanted to have the responsibility of an "intern-of-hospitals." They could apply for a "functional" internship to the chief of service of each hospital to which they rotated. Depending on the chief's knowledge of the candidate's previous performance during his clerkship years, he could grant the student the responsibility of an intern.

Only about 15 to 20% of the students of each class were "Interns-of-Hospitals," while another 15 to 20% made up the "provisional" and "functional" interns. In the last few years, these percentages increased considerably. The remainder of the class served advanced clerkships. As stated above, successfully completing the final clinical examination and defending the thesis concluded the physician's education. Table 1 summarizes the medical education system in South Vietnam up to April, 1975.

For the past 30 years, immediately after graduation, most of the men were drafted into the Armed Forces. The women and those men for whom military service had been deferred for family or health reasons, were assigned to the Ministry of Health for service in hospitals. Regardless of their assignment, including those in the military service, almost all of the physicians maintained a private practice in their off-duty time, so that they could be considered, more or less, as general practitioners.

II. THE OKLAHOMA EDUCATION PROGRAM FOR THE VIETNAMESE EMIGRE PHYSICIANS

The Vietnamese emigre physicians in Oklahoma may be divided into two broad categories: a) those who had been certified by the ECFMG before they came to the United States; and, b) those who had not.

a. **Vietnamese Emigre Physicians with ECFMG Certifications** — At the time of the fall of South Vietnam, four physicians were at various periods of their training in Oklahoma under the United States Department of State, Agency for International Development (USAID); the American Medical Association (AMA); and the Vietnamese Medical School Project (VMSP). They were maintained at their host institutions until August, 1975, when all support funds were terminated on the instruction of the USAID and these individuals were left on their own, dependent on available resources at the host institutions and the good will of their individual mentors. One Vietnamese physician who had been in neurology training at Georgetown University School of Medicine, Washington, DC, for two years under the USAID/AMA/VMSP, came to Oklahoma City in June, 1975. In addition to these five physicians, twelve other physicians who came to America in May, 1975, as Indochina refugees and who had passed the ECFMG examination while in Vietnam, moved to Oklahoma City. At the University of Oklahoma (OU) the Department of Medicine, using its own resources and contributions from philanthropists, was able to place fifteen of these physicians in the training program. The Department of Pathology at OU was able to support a physician in pathology. The Department of Neurology found the resources in January, 1976, to support one neurology trainee.

b. **Vietnamese emigre physicians without ECFMG** — The re-education program for these physicians has gone through four phases:

I. August, 1975 to January, 1976 — OU Department of Medicine-sponsored ECFMG Review Course.

II. March, 1976 to July 1976 — DHEW-sponsored ECFMG Preparatory Course.

III. October, 1976 to December, 1976 — OU Department of Medicine-sponsored Intensive

Review Courses in Medicine for the ECFMG and a DHEW-sponsored Intensive Review Course in English for the ECFMG.

IV. March, 1977 to June, 1977 — OU Department of Medicine-sponsored FLEX Preparatory Course.

At the time of this writing, the complete results of Phase 4 are not known and therefore cannot be included in this report.

PHASE I

In August, 1975, there were 24 physicians without ECFMG certification in Oklahoma City. The Department of Medicine at OU organized a review course for them which consisted mostly of review lectures on clinical medicine with discussions generated by multiple-choice type questions. In January 1976, three of the twenty-four (12.5%) physicians were certified after taking the ECFMG examination, fifteen (62.5%) passed the medical portion and failed the English portion and six (2.5%) failed the entire examination. These last twenty-one physicians and 89 others coming from the central and southwest United States (US) made up the 110 physicians who were students in Phase 2 of the DHEW-ECFMG preparatory course.

The fact that three-quarters of our students passed the medical portion of the examination was very encouraging. On the other hand, an 87% failure rate on the English test came as a surprise to the examinees, since those Vietnamese physicians who had passed the ECFMG prior to coming to the US had found the English test relatively easy. All in all, this first phase provided us with valuable experience and insight into the problems we and these physicians would face in the future.

PHASE II

The course of Phase II prepared the physicians for the medical and the English portions of the test of the July, 1976 ECFMG examination. Details of the preparatory course were previously reported.⁹ There were 110 physicians (one dropped out) in this phase of re-education, of whom 21 had already passed the medical portion of the January, 1976 ECFMG examination, and therefore had to repeat only the English test. Eighteen of the 21 (85.7%) passed the language test and became ECFMG certified. The results of the July, 1976 ECFMG examination for the other 88 physicians are shown in Table 2.

TABLE 2

JULY 1976, ECFMG EXAMINATION RESULTS:
88 PHYSICIANS

	Passed Medicine		Failed Medicine		Total	
	%	No.	%	No.	%	No.
Passed English (ECFMG Certified)	20	18	6	5	26	23
Failed English	52	46	22	19	74	65
Total	72	64	28	24	100	88

At the end of Phase II we had been assisting 132 Vietnamese physicians in Oklahoma. Table 3 shows the cumulative percentage of ECFMG certification of these physicians.

From the experience with this course, we have come to the following conclusions⁹:

- 1) Language barriers were a factor in passing the medical portion of the ECFMG.
- 2) The English test, however, becomes a real obstacle to ECFMG certification.
- 3) The review course does help to improve the passing rate on the ECFMG examination. The 72% passing rate of Phase II was in sharp contrast to the 20 to 30% of success rate in South Vietnam where there was no formal preparatory course for the ECFMG examination.^{10, 11}
- 4) Age is not an important factor in passing the examination.
- 5) Statistically, women did better than men in this examination.
- 6) There are significant differences in the results of examination by question types.¹¹ Improvement is possible through frequent testings.

PHASE III

In view of the very encouraging results of the medical portion and the serious problems with English, we decided that another attempt for review of English was needed. With financial

TABLE 3

ECFMG CERTIFICATION STATES OF 132 VIETNAMESE PHYSICIANS
AT THE END OF PHASE II

	Passed Medicine		Failed Medicine		Total	
	%	No.	%	No.	%	No.
Passed English	42.42	56	2.29	3	44.7	59
Failed English	37.12	49	18.18	24	55.3	73
Total	79.54	105	20.46	27	100.0	132

TABLE 4
ECFMG CERTIFICATION STATUS
OF VIETNAMESE PHYSICIANS
AT THE END OF PHASE III

	Passed Medicine		Failed Medicine		Total	
	%	No.	%	No.	%	No.
Passed English	68.18	90	0	0	68.18	90
Failed English	22.72	30	9.1	12	31.82	42
Total	90.90	120	9.1	12	100.0	132

support from DHEW, a two-and-a-half month intensive English review course was organized with 22 physicians participating. Fifteen (68%) physicians subsequently passed the test. Simultaneously, a two-month course in Medicine (November, 1976 to January, 1977) was organized, supported by contributions from various individuals. Unfortunately, for many personal and family reasons, of the 27 physicians who needed to repeat the examination, only nine attended. The remaining students studied independently. Seven of the nine or 77.7% passed the medical test but all failed the English portion.

Table 4 shows the cumulative percentage of ECFMG certification of the Vietnamese physicians, including those studying independently. From March, 1976 to March, 1977, 90% of the tested physicians passed the medical portion of the ECFMG, and 68% were ECFMG certified. Those who failed English and passed Medicine are studying very diligently and we are expecting that by July, 1977, 80 to 90% will be ECFMG certified. Compilation of results provided by the ECFMG allows us to show in Table 5 the number of times these physicians took the examination. These numbers concern the medical portion only. It was noted that the

TABLE 5

Number of Times ECFMG Examination
Taken (Up to January, 1977)

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Number of Physicians Taking ECFMG

46	61	20	3	1	0	0	1
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Total Number of Physicians

Taking ECFMG132

N.B. Among the 12 physicians who are not certified by ECFMG so far, one physician has taken the examination once, five have made two attempts, and six three attempts. For the two who took five and eight times, both passed immediately after one review course in the US but have serious language problems.

TABLE 6

AVERAGE SCORE OF EACH COMPONENT
OF THE FLEX EXAMINATION OF 33
PASSING PHYSICIANS

Basic Sciences	Anatomy	Physiology	Bio-chemistry	Pathology	Micro-biology	Pharmacology
69.75	70.40	66.12	64.40	85.21	66.93	76.56
Clinical Sciences	Medicine	Surgery	GYN-OB	Pub Hlth	Pediatrics	Psychiatry
72.69	86.19	80.60	77.90	73.75	82.00	67.09
Clinical Competence						
80.00						

majority of the participants passed the medical portion after one review course although two-thirds have taken the examination more than once.

PHASE IV

Phase IV was the licensure examination phase. At the end of Phase III, we felt that logistically and financially, we could not provide further instruction for the 12 physicians who failed the ECFMG. We believed that it would be more worthwhile to help the ECFMG certified physicians to prepare for the Federated Licensure Examination (FLEX) on the basis of the excellent results scored on this examination by 36 of the 132 physicians. In fact 33 (91%) passed the examination and among them only three had to take the test twice. Of the 33 physicians, nine had a FLEX-weighted average of 80. Table 7 summarizes the average score of each FLEX component of the 33 physicians and it shows some interesting points which deserve comment. The scores in the Basic Sciences portion were low except for Pathology and Pharmacology. Since the Basic Sciences part is only one-sixth of the FLEX score, the candidates probably did not review these subjects seriously. The clinical review included considerable amounts of Pathology and Pharmacology. As for the clinical sciences, they did reasonably well except for the strikingly low score in psychiatry. This probably relates to the fact that in the Vietnamese medical education, very little if any, psychiatry was taught; and also probably to cultural differences and language problems. It brings up the important point that these physicians do need training in psychiatry before they can become proficient in the American health-care system. The good scores in the clinical competence part of the examination accounts for the

high passing rate since it represents one-half of the FLEX weighted average score.

Another FLEX review course was begun in March, 1977 and ended in mid-June, 1977. Forty-two physicians of the original 132 group and 22 from other states attended the FLEX study group. At the time of this writing, results are not yet available to be reported.

In brief, at the end of Phase IV, the Health Sciences Center at OU has assisted a total of 154 Vietnamese emigre physicians in their re-education process.

III. PROBLEMS OF ADJUSTMENT OF THE VIETNAMESE PHYSICIANS AND THEIR FAMILIES IN THE UNITED STATES.

In order to have some idea of the hardships these emigre physicians may have encountered in their adjustment to the new private, social, and professional life in this country, questionnaires were sent to 154 physicians and 77 responded. The following data, therefore, represent the responders. The group was reluctant to answer questions about their reasons for leaving Vietnam and for coming to the United States.

Regarding the date of arrival in the United States, one has been here since January, 1975, on scholarship from the Army in Texas; 54 (70.1%) came in April and May 1975; 21 (27.2%) arrived between June and November, 1975. The latter physicians left South Vietnam by boat to Thailand or to the Philippines after the Communist takeover. One came in February, 1976, from France.

Since their arrival here, 19 (24.6%) held jobs unrelated to their profession, 41 (53.2%) worked as allied health professionals, 10 (12.9%) lived on their savings from Vietnam and only seven (9.3%) received food stamps during their period of study. None were receiving welfare payment. Many of the spouses worked to support the family, although exact numbers were not available.

Table 7 shows the general problems of adjustment.

To the question "Was the adjustment process more difficult than you expected?" 33 (42.8%) said yes, 40 (51.9%) responded about what they expected, and four (5.3%) found the process easier. Seventy-four (96%) found the review course very helpful for passing the examination, the other three (4%) thought the course of little value. As for their professional goal after

TABLE 7

GENERAL PROBLEMS OF ADJUSTMENT OF VIETNAMESE PHYSICIANS IN THE US+

	VERY DIFFICULT		FAIRLY DIFFICULT		UNANSWERED		SLIGHTLY DIFFICULT		NO PROBLEM	
	No.	%	No.	%	No.	%	No.	%	No.	%
FINANCIAL	23	29.8	35	45.4	14	18.3	5	6.5	0	0
LANGUAGE BARRIER	30	38.9	28	36.5	10	13	8	10.4	1	1.2
HEALTH	1	1.4	4	5.1	8	10.5	60	77.9	4	5.1
CLIMATE	1	1.4	13	17	40	52	19	24.5	4	5.1
PROBLEM FOR SPOUSE & CHILDREN*	13	11.2	57	48.7	26	22.2	21	17.9	0	0
LICENSURE REQUIREMENT	10	13	58	75.5	7	9.0	2	2.5	0	0

+ Physicians in the Oklahoma training program only.

* Some physicians have many children. (Total — 117 persons)

licensure, seven (9%) are undecided, seven (9%) want to go on to postgraduate training for Specialty Board Certification, 63 (82%) prefer to go on to practice medicine after enough training for licensure. Of the latter group, 22 (35%) want to work in a hospital as salaried physicians, four (6.3%) are undecided and 37 (58.7%) wish to enter private practice, with 35 (95%) desiring group practice and only two (5%) preferring solo practice. Sixty-nine (89.5%) responded that the legal aspect of medical practice in the United States influenced their decisions not to go into solo private practice. Only eight (10.5%) found it not very important.

Finally, 57 (74%) found very little or no prejudice in their daily life in America in any way while 20 (26%) answered "not too much." This may be related to the fact that they tended to associate with other Vietnamese except for a few select friends. The factor of prejudice may be important in the difficulty they are experiencing in obtaining residencies.

Seventy-seven (100%) found that their most serious problem now is to find an internship position. We will come back to this topic.

TABLE 8

DISTRIBUTION OF 21 VIETNAMESE PHYSICIANS SERVING AT THE UNIVERSITY OF OKLAHOMA HEALTH SCIENCES CENTER (to August, 1977)

OUHSC	FACULTY	RESIDENTS	TOTAL
		FELLOWS	
Family Medicine	0	5	5
Internal Medicine	2	6	8
Neurology	1	0	1
Pathology	0	1	1
Pediatrics	0	4	4
Radiology	0	1	1
Anesthesiology	0	1	1
Total	3	18	21

IV. CURRENT STATUS OF THE VIETNAMESE PHYSICIANS IN OKLAHOMA, AUGUST, 1977

There are 41 emigre physicians staying in Oklahoma at the time of this writing. Twenty-one physicians are serving as faculty or housestaff members at the OU Health Sciences Center in Oklahoma City, while 20 are looking for internship positions. Table 8 shows the distribution of the 21 physicians.

V. STATUS OF THE 154 VIETNAMESE PHYSICIANS IN AUGUST, 1977

Six physicians applied for internships through the National Intern and Resident Matching Program (NIRMP) and one was matched in Medicine and one in Family Medicine. Seventeen additional physicians have been able to find housestaff positions.

Table 9 shows the status of these physicians in August, 1977.

VI. FUTURE OF THE VIETNAMESE PHYSICIANS

From what is presented above, it would seem that we have ample reason to be encouraged by what has been accomplished. In reality, we are highly cautious, even pessimistic, in some re-

TABLE 9

STATUS OF 154 VIETNAMESE PHYSICIANS IN AUGUST, 1977

Faculty	3
Housestaff	34
Private Practice	37
Salaried Physicians	9
Looking for Internship	34
Studying for ECFMG:	
—English test only	25
—English & Medicine	12
TOTAL	154

spects, regarding the future of these physicians.

For most of the states in the US, the licensure procedure for foreign medical graduates requires that the physician be certified by ECFMG and that he pass the FLEX (a score of 75 or above FLEX weighted average), that he have one year of postgraduate training in a program with an accredited hospital in the US. A few states (eg, Texas, New Mexico) do not require a year of training. The FLEX weighted average is accepted by 41 states for licensure purposes. The remaining nine states accept the 75 FLEX weighted average but have additional requirements concerning minimal acceptable grades in individual subjects or parts of the examination.¹¹

Where then lies the problem for these physicians and what does the future hold for them?

Two main problems are to be considered, one is to help those who are not yet ECFMG certified, and also to help those who are certified but who want to take the FLEX. The other problem is to find internship positions for the ECFMG certified-physicians.

It is well known that internship and residency positions are difficult to obtain for all American and Foreign Medical graduates.^{12, 13} This fact was well borne out in March, 1977, when upon publication of the National Intern and Resident Matching Program some of our faculty members in the Department of Medicine, tried to obtain unfilled positions for these Vietnamese physicians. None were placed following hundreds of telephone calls, although 17 others did find positions in late June, 1977. It is important to note that up to now, no clear cut information is available as to whether or not these emigre physicians are affected by the Health Professions Educational Act of 1976 (PL 94:484). Many, however, are obtaining their immigrant status at the beginning of August, 1977.

What else can these physicians do if no internship is available? We believe that many, upon ECFMG and FLEX certification, will go to states whose licensure procedures do not require internship even though as physicians they would prefer more training. And we agree that they should have at least one year of training in an American program. For this reason, we hope that many training programs will accommodate one or two physicians

perhaps through funding by communities in exchange for obligated service. Another way to accomplish this goal is to get federal support for those training positions, again in exchange for obligated service in the various federal health-care institutions.

As for those physicians who are not certified by ECFMG or who want to prepare for the FLEX, we believe that we have done what we could and, unless federal or private financial support is available, they will have to do it on their own initiative.

It has long been acknowledged that judging the competence of a physician is a difficult task. Many examinations have been developed for that purpose, and evaluating their validity is beyond the objective of this report. We believe, however, that until there is a better way to evaluate physician competence, regardless of their origins or medical backgrounds, a foreign medical graduate who 1) has passed the ECFMG examination after no more than three attempts and, 2) has had one year of postgraduate training in an approved program, and 3) who has passed the FLEX, should be considered eligible to deliver health care. So for these "new" physicians who came to this country under very special circumstances, we hope that every effort will be expended to help them reach full licensure as early as possible. Only then, will they be able to contribute to the well-being of the people of this country which they have adopted for the sake of freedom. □

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Lipoatrophic Diabetes With Aortic Insufficiency

JOSEPH BRETZA, MD

Lipoatrophic diabetes is a congenital, multi-system disorder characterized by severe insulin resistance. The appearance of syncopal episodes require close observation since it may presage more serious sequelae of this disease.

Less than 100 cases of total lipoatrophic diabetes have been reported in the literature since Ziegler in 1928 described the first case.¹ The criteria for the diagnosis of lipoatrophic diabetes were enumerated by Lawrence² in 1946, and included: (1) total absence of adipose tissue; (2) severe hyperlipidemia; (3) insulin-resistant diabetes; (4) lack of ketoacidosis; (5) hepatosplenomegaly; (6) elevated basal metabolic rate; and (7) acanthosis nigricans. The heterogeneity of the congenital form of total lipodystrophy has long been recognized. Other less common features of this disorder include hypertrichosis, muscular overdevelopment, genital enlargement, acromegaly features, accelerated linear growth, and asymmetric septal hypertrophy. This case report describes a patient who de-

veloped aortic insufficiency after fourteen years of asymptomatic cardiomyopathy.

CASE REPORT

The patient is a 25-year-old female Cherokee Indian who was a product of a full term, normal childbirth. Her birth weight was four pounds and four ounces. There was no history of consanguinity. Her first year of life was characterized by recurrent bouts of diarrhea diagnosed as "celiac disease." At the age of two years she was found to have hepatosplenomegaly and bilateral inguinal hernias. Liver tissue obtained by biopsy at that time revealed marked fatty metamorphosis. At age 11 years she was hospitalized for evaluation of a heart murmur and results of cardiac catheterization suggested pulmonary hypertension and hemodynamics consistent with a cardiomyopathy. The diagnosis of lipoatrophic diabetes was made at this time also after biopsy of the supraclavicular fat pad failed to reveal adipose cells. A repeat liver biopsy provided tissue which showed early cirrhosis. The patient's menses began at 13 years of age and normal menstrual periods occurred for five years. Subsequently oligomenorrhea and irregular cycles began and pelvic examination revealed a left adnexal mass. Laparotomy was performed when the patient was 18 years old and multiple ovarian cysts were removed. The absence of mesenteric fat was noted at that time. She

was diagnosed as having the Stein-Levinthal syndrome.

About the same time, in 1970, the patient was found to have overt diabetes mellitus. The patient was evaluated at the Joslin Clinic by Dr Rossini and given 9000 units of insulin intravenously without effect. In addition, acanthosis nigricans was documented after skin biopsy. Simultaneously, Hashimoto's thyroiditis was documented after needle biopsy of the gland and appropriate laboratory studies. In July, 1977, when admitted to the Claremore Indian Hospital the patient was 25 years old. She was admitted because of syncope following a venipuncture. She denied any prior episodes of syncope, chest pain, palpitations or distress while participating in athletic activities. Her vital signs were normal. There was absence of subcutaneous fatty tissues with prominent musculature and acanthosis nigricans in the axilla, groin, and gluteal area. Lipemia retinalis was present and liver span of 14 cm was determined by percussion. The point of maximal precordial impulse was located in the midclavicular line in the fifth intercostal space. No thrills or heaves were detected. A grade III/VI harsh systolic ejection murmur was audible, being loudest at the left sternal margin in the third intercostal space. At grade I/VI early diastolic blow was also audible heard best with the patient leaning forward and exhaling, at the right second intercostal space. No accentuation of P₂ or audible S₃ or S₄ was present. Fasting blood sugars averaged 300 mg%. A type V hyperlipidemia with chylomicronemia and triglycerides exceeding 3000 mg% was established. Liver function tests were minimally abnormal. No ketosis was present. Chest x-ray revealed normal heart size and pulmonary vasculature. Electrocardiogram revealed incomplete right bundle branch block. The echocardiogram demonstrated dilation of the aortic root with aortic regurgitation. The interventricu-

lar septum was of normal size and mitral valve was normal. The patient had no arrhythmias while in the intensive care unit and it was felt that her syncope was due to a vasovagal reaction. She was discharged and given instructions about subacute bacterial endocarditis prophylaxis.

DISCUSSION

Congenital total lipomatrophic diabetes is genetically transmitted as an autosomal recessive.³ All the known anatomical complications of diabetes mellitus have been reported to occur in this disorder.⁴ The cause of this obscure illness is postulated to be due to excess hypothalamic releasing-factors. Since all assays for pituitary hormones customarily reveal normal values and hypophysectomy does not alter the progression of the disease it is felt that the hypothalamic releasing-factors have a direct effect on peripheral tissue.^{5, 6} Support for this theory has been bolstered by the report of lipodystrophy occurring in conjunction with an astrocytoma that impinged on the third ventricle leading to hypothalamic dysfunction.⁷ Animal studies have demonstrated discrete lipid centers in the anterior-inferior hypothalamus.⁸

Treatment is almost non-existent although combination insulin and prednisone therapy has been reported to decrease the hepatomegaly, hyperlipidemia and hyperglycemia.⁹ The administration of Pemozide, a drug which blocks dopamine receptors in the Central Nervous System, has also met with variable success.⁹ A recent report claims that fenfluramine, which is both a dopamine antagonist and a serotonin-lowering agent, is capable of restoring normoglycemia and insulin sensitivity.¹⁰ The cause of death is often due to cirrhosis and hepatic failure. Other factors accounting for premature deaths in these individuals are severe atherosclerosis, exsanguination due to esophageal varices and intercurrent infection.

There has never been a reported case of ketoacidosis in lipomatrophic diabetes. This is felt to be due to insulin which suppresses lipolysis. In addition since these patients lack adipose tissue they are not capable of mobilizing free fatty acids for ketone production. Severe hyperlipidemia is also one of the characteristic findings. The hyperlipidemia consists of marked increases of triglycerides with variable levels of chylomicrons and

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cholesterol. The cause for the increased lipids is a combination of over-production and defective disposal since these people are incapable of forming panniculus. Histologically adipocytes can rarely be demonstrated but they contain very little fat.^{4, 11} The paucity of body fat pertains not only to subcutaneous sites but also to perirenal, retroperitoneal, mesenteric, epicardial, bone marrow and even Bichat's cheek fat pads. The breast is the only organ in which adipose tissue is found.⁴

Another characteristic of lipoatrophic diabetes is hypermetabolism in spite of normal thyroid function tests. Basal metabolic rates of 30% to 60% above normal are usually found and levels as high as 170% above normal have been reported.⁷ The hyperpigmentation found in this disorder is not due to MSH since skin darkening persists after hypophysectomy.⁵ The association between acanthosis nigricans and marked insulin resistance has been reported previously.¹² The final characteristic of lipodystrophy is hepatomegaly associated with fatty infiltration of the organ. In the latter stages this progresses to cirrhosis. The degree of liver enlargement varies from a barely palpable liver margin to one that reaches the pelvic brim.

The known cardiac manifestations of congenital total lipoatrophy are premature coronary atherosclerosis, myocardial fibrosis, cardiomyopathy, and asymmetric septal hypertrophy.^{7, 8, 13} These patients have a true generalized muscle hypertrophy (as demonstrated in tissue obtained by muscle biopsy) and increased urinary creatinine excretion.¹⁴ The skeletal muscle hypertrophy is associated with a parallel in the myocardium with the attendant hazard of proliferation of the septal muscular fibers resulting in impaired cardiac output and secondary mitral incompetence.

Aortic regurgitation in association with congenital total lipodystrophy has not been reported previously. The cause of the aortic insufficiency present in the cited case could not be ascribed to rheumatic, congenital

(bicuspid) or luetic processes by available history or laboratory results. The development of aortic regurgitation after echocardiographic demonstration of aortic root dilatation may represent either the cardiodynamic sequelae of two decades of cardiomyopathy or could be due to an underlying metabolic defect which would require histochemical and enzymatic studies for elucidation.

Acknowledgements: Appreciation is extended to Nancy Washington and Ruby Bridges for secretarial assistance. In addition, the author thanks Dr. Rossini of the Joslin Clinic for his metabolic studies and continued follow-up on this patient. □

ADDENDUM

The patient was seen in followup six months later and no aortic regurgitation was heard. A repeat echocardiogram demonstrated only minimal aortic root dilatation. No further syncopal spells have occurred.

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Physician, Educator, Anatomist and Mass Murderer

ERNEST LACHMAN, MD

August Hirt, a well-known anatomist and department chairman during the Hitler period, killed around 100 Jewish concentration camp inmates in order to add their skulls to his collection. Hirt was never apprehended and died in 1946.

The sinister, shocking paradox of the title poses the questions: Who, When, Where and How? One may think of vivisections in pre-classical times or one might recall the gruesome story of Dr Robert Knox, the Edinburgh anatomist, who in the first third of the nineteenth century became involved with the rogues Burke and Hare. The latter two acquired inglorious fame by smothering 16 victims and selling their warm bodies to Dr Knox for dissection. Although exonerated by legal authorities, Knox may well have suspected the source of the bodies and the cause of their deaths. His name, in conjunction with those of the two executed murderers, has been perpetuated in medical history as the ogre of anatomical pursuits. Books, plays, movies and dozens of articles have been written about the case.

The far more monstrous anti-hero of our report is August Hirt, MD, (1898-1946), Professor and Chairman of the Department of Anatomy at the University of Strassbourg, who in the early 1940's sacrificed approximately a hundred or more Jewish concentration camp inmates for the purpose of adding their skulls to his bone collection.

I came across his name for the first time in William L. Shirer's *"The Rise and Fall of the Third Reich."* The author, in a short narrative, described how the prisoners were transported from Auschwitz across Germany to a concentration camp near Strassbourg and then killed in the gas chambers according to detailed instructions by Hirt. He was interested in their skulls because his collection lacked skulls of Jews, and particularly Jewish Bolshevik Commissars, who in Hirt's direct quotation "represent the prototype of the repulsive, but characteristic subhuman." With the help of extensive information supplied by numerous friends and authorities in this country, Israel and Germany, the scant book and journal literature, the "Protocols of the Trials of the Major War Criminals before an International Tribunal," and the records of the Trials of War Criminals before an American Tribunal, I compiled and evaluated the available data. This report has just been published in the *"Bulletin of the History of Medicine,"* Volume 51, Number 4.

This paper is not the place to narrate the ghastly details of this case, but some comments seem indicated. What was the background of August Hirt? He received his MD degree from the University of Heidelberg in 1922 and his subsequent anatomical training under three outstanding authorities, two of whom were also my own teachers. One of them, Professor Hoepke, gave me a perceptive description of Hirt's personality before the Nazis came to power. Hirt was very sociable and friendly in dealing with medical students. Politically he was completely inactive. Others describe him as loud-mouthed and as a jovial backslapper. His anatomical research is voluminous and quite respectable. He was well-recognized in academic anatomical circles and was editor of a German anatomical journal. From his start as Assistant Professor of Anatomy in 1930 he climbed the academic ladder rather quickly and around 1940 was appointed Director and Chairman of the Anatomy Department in Strassbourg. Soon he became quite prominent in the Nazi party — particularly the S.S., and ingratiated himself with their leadership. He was a personal friend of Himmler's and corresponded with Hitler. He lectured in uniform and took his revolver to the classroom, where he displayed it quite conspicuously. He terrified the French-speaking students by his rude and boorish personality and greatly favored the German students.

The German dramatist Hochhuth, who seems to have had personal knowledge of Hirt, portrays him in one of his plays as a barrel-chested, gargantuan hard-drinker and parenthetically remarks that the real Hirt was a revolting cynic, with the head of a vulture and a bullet-scarred mandible. Taking literary license with Hirt's actions and expressions, he has Hirt in a well-staged bowling scene brag to his friends about his planned skeleton collection and reveals to them in his alcoholic rapture his inner-most dream, that on the day of the final victory he would want to listen to Bach's B-minor Mass in the Strassbourg cathedral and then show the Führer his rare skull collection, a bizarre and schizoid combination, which according to historical reports is not too unusual for some of the leading Nazis.

Of the originally processed 115 victims, 86 were actually transferred to Hirt, who was particularly anxious that the heads of the

Jewish prisoners should not be damaged while they were killed in the gas chambers. The gruesome details of these murders are in the records of the trial of Sievers, who was Hirt's superior in the Nazi Institution for Research into Heredity and who in answer to Hirt's request authorized and financed the loathsome undertaking. The protocols also give the testimony of a French embalmer at Hirt's institute who before the court reported how the still warm bodies arrived in installments at the Anatomical Institute. Against the strictest and threatening orders of Hirt he took down their tattooed concentration camp numbers. In order to prevent the approaching allies from discovering these bodies, they had to be cremated at the explicit command of the Nazi authorities. Hirt himself escaped and was never brought to trial, but, according to a direct communication from the German Attorney General, he died in 1946 in a village in the Black Forest. This challenges the veracity of Shirer's statement that Hirt may have fled to South America. According to further information I received from the German Attorney General, the whole affair was still *sub judice* in 1970 in a trial against Hirt's immediate associates. The case is now closed and the files are available in the Institute for Contemporary History in Munich. On orders of the International Tribunal, Hirt's superior, Sievers, and six other physician-war-criminals were executed by hanging.

It is revealing to note that Hirt in his pre-Nazi period occupied himself with bona fide academic subjects, until as a loyal Nazi and high S.S. officer he switched rather abruptly to the discredited field of phrenology. Past representatives of this theory, such as Gall and Lombroso in the early nineteenth century, had contended that man's physical characteristics, which are displayed best in

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the skull, allow an expert to deduce criminal tendencies. At Hirt's time this theory was already completely discredited and had been discarded. It is hard to believe that Hirt, the scientist, would in sincerity accept and even try to revive this field. One must come to the conclusion that he did it only to curry favor with his Nazi superiors and support their racial theories. To evaluate Hirt's character, one should take account of the fact that Hirt, while in Strassbourg, participated very actively in the adjacent concentration camp in most cruel experiments on living prisoners, such as exposure of inmates to mustard gas and other noxious agents, experiments that, in addition to causing unbearable suffering, often led to permanent disablement or death.

One must not believe that Hirt stands alone in his unspeakable barbarism. Of the 90,000 physicians in Germany at the time of Hitler, approximately 350 participated in human experiments of unimaginable cruelty, ie, every 300th German physician was directly involved as a war criminal, a rather disconcerting percentage. Their senseless crimes are all on the records. It is clear that for every guilty scientist and physician there must have been one or more witnesses. While the details of the ruthless mass murders may not have been well known at that time in Germany and the Western World, enough people had fairly intimate knowledge of what went on in the concentration camps. One must keep in mind that in order for evil men to succeed in their nefarious deeds, the silence of many otherwise good people is required.

Another puzzling question has often been asked. Were Hirt and other criminals of similar type insane at the height of their criminal career? All forensic and psychiatric authorities agree that they were not. It has been pointed out that the concept of insanity in a society where moral and spiritual values have lost their meaning is itself meaningless. An additional factor cannot be overlooked. These crimes were committed by people who were not born mentally deficient, but with normal intellectual endowment, who were able to acquire scientific expertise and desirable positions in society. Hirt and many others of his medical fellows in crime were the product of the vaunted humanistic indoc-

trination of the German universities, including the Hippocratic code prescribed by their profession. These educational endeavors certainly failed. In Hirt's case there is the added incriminating fact that as director of a politically important academic institution and member of the Nazi party he could not have been under life- or position-endangering pressure forcing him to become a cog in the wheel of Nazi atrocities. It can be assumed that it was unmitigated ambition which turned him from legitimate anatomical pursuits to the pseudo-scientific field of phrenology, purely in order to ingratiate himself with the Nazi leadership and their asinine and mystic notions of the superiority of the Nordic-Teutonic race and the inferiority of all other races. In exchange there were rewards, promotions and increased socioeconomic standing.

The well-known writer Eli Wiesel, who himself had been an inmate of a concentration camp and been subjected to Nazi brutality, finds it impossible to understand how these leading members of the Nazi elite corps were able to go on with their monstrous experiments and killings day-in and day-out and then go home to their families, tend their gardens, or be overwhelmed by the beauty of a landscape. Wiesel cannot comprehend that men can be born into the upper or middle classes, receive a first-rate education, respect parents and neighbors, become important members of society and at the same time brutally massacre men, women and children. Had the killers been savages or sadists, the shock of their deeds would have been less. But as Wiesel says, they were doctors and lawyers, philosophers and sociologists or even theologians.

What then is the answer to this riddle? One historian describes the shocking phenomenon of the holocaust to deep-seated mystical tendencies in the broader tradition of German culture. This explanation seems rather simplistic and can hardly be sustained in the light of more recent genocidal crimes of other national groups, from Biafra and Bangladesh to Uganda and Cambodia, or the earlier massacre of one to one and one-half million Armenians by the Turks around 1915. Given a basically immoral and corrupt governmental system, it must be assumed that otherwise ordinary people can be made to commit acts of unimaginable evil.

Hannah Arendt, an expert on the

holocaust, stated that the deeds were monstrous but the doers were quite banal, non-demonic people. Their unnatural crimes could be duplicated in any country of the world, as one psychiatrist at the Nuremberg trial stated. In Germany it just so happened that the following combination of factors created this abject debasement of individuals: a lost war, humiliating peace conditions, inflation, unemployment, charismatic leadership and unlimited financial backing from the captains of Germany industry. Different constellations

of circumstances in other countries could lead to similar horrible results. Conventional institutions such as the family, schools and universities, churches, parliament, constitution and laws seem no absolute impediment to this degradation . . . When situational and social forces of the type exemplified above act upon ordinary people, they may succumb. The capacity of man for evil — as for good — appears unlimited.

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ANNOUNCING ANNUAL JOURNALISM CONTEST

The Journal of the Oklahoma State Medical Association is offering an annual prize for the best manuscript or editorial submitted for publication to *The Journal* by a University of Oklahoma College of Medicine student.

Winner of this competition will receive a \$100.00 cash award and a personalized medallion.

Deadline for submission of all entries is February 1, 1979. Manuscripts should be typewritten, double spaced and submitted in original and one copy.

Further information may be obtained by writing *The Journal of the Oklahoma State Medical Association*, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118 or calling 843-9571.

Awakening of a New Minority

By David D. Winbray,
Putnam City High School

Editor's Note: The Oklahoma State Medical Association is a supporter of the Governor's Committee on the Employment of the Handicapped and a sponsor of the yearly "Ability Counts" contest. The following is this year's winning paper by Putnam City High School student, David D. Winbray. The OSMA contributes \$250 each year to help sponsor transportation for the winning student and his or her teacher to the national awards in Washington, DC.

One has only to look back through history to see how poorly the handicapped have been treated. Some cultures, like that of ancient Sparta, destroyed their physically impaired; others segregated them. Our civilization has progressed beyond that point; we merely neglect them. The handicapped of today can be compared to a deserted house, overgrown with weeds. The weeds, analogous to obstacles to be overcome, stand between the neglected house and the outside world.

Picture an abandoned home, standing alone, surrounded by tall, choking weeds. Windows have been broken by vandals, and rain drips through the leaking roof. No longer does one sense life there. Battered by the elements and neglected by the community, the house seems condemned to destruction. A carpenter, one endowed with vision, passes the forlorn home daily. He senses its potential and longs to cut the weeds and restore the house to its former usefulness. One day he notices a sign on the sagging front door, cautioning the public to

stay away. He realizes that to save the house he must act soon, lest it collapse from neglect.

The next day the carpenter visits City Hall and talks to anyone and everyone who will listen. He reasons, "If those walls could talk, surely they would protest. Has so much neglect occurred that no one cares? Surely, if the community cares enough, we can save this house; not only can we save the outer shell, but we can reconstruct the interior as well!" The carpenter's persistence is rewarded when the Planning Commission, realizing the possible contribution of the restored home to the neighborhood, makes it possible for him to purchase the property. He soon begins rehabilitating the once proud house, and the neighbors, inspired by his efforts, offer helping hands. Replaced windows sparkle in the sunlight, new paint glistens, and the roof no longer leaks. The polished front door opens wide to welcome visitors and friends. Cheerful rooms emanate life, living, and laughter, and the house becomes the pride of the neighborhood.

Like the abandoned house, the physically and mentally impaired are too often condemned to live useless, unproductive lives because society fails to recognize their potential. They too must overcome the "weeds" that stand between them and community life. Just as the old house realized its destiny through the insight of the carpenter, the handicapped reach their potential when society recognizes them as being useful, contributing members of their communities. Weeds need to be replaced

(Continued on Page 361)

(Continued from Page 358)

with flowering shrubs; broken lives, with mended ones.

Although the handicapped minority can do much to help themselves through positive attitudes and a willingness to retrain, it is the obligation of the majority to assist them. Through the efforts of perceptive persons like the carpenter, major advances have been made. The President's Committee on Employment of the Handicapped was implemented by President Franklin D. Roosevelt, himself a disabled victim of polio. The vision of this committee has spread to all fifty states, each of which now has a Governor's Committee to help in the rebuilding of lives disabled by birth, accident, and disease. The Tax Reform Act of 1976 includes tax relief for businesses that remove physical barriers to the handicapped. Lowered public telephones and drinking fountains, modified restrooms, and installation of curb cuts and other ramps — all these have improved the physical environment for the handicapped. Federal law now insures the right of handicapped children to attend public schools. I have talked with several disabled students who attend my high school, and they seem to have adapted well and benefited from this mainstream experience. When the minority are accorded their innate rights, they can prove their abilities and succeed.

More and more often, the handicapped are speaking out. At the 1977 Nevada State White House Conference, Governor George Wallace of Alabama was the keynote speaker. He must

direct the affairs of his office from a wheel chair since becoming a member of the new minority. The mission of the White House Conference was to assess, and generate an awareness of, the problems and potentials of the handicapped; and to make recommendations to the President which, if implemented, will enable the handicapped to live independently, with dignity, and with participation in community life to the greatest degree possible. Thus, it is evident that the new minority will no longer stand for indifference.

Each of us is a carpenter in building opportunities for the disabled. Each enlightened citizen and open-minded employer does his part toward rehabilitating the neglected minority. Each understanding individual contributes to the dignity of his disabled neighbor. Many of the weeds have been trampled or uprooted as enlightened volunteers spread the word and crusade against barriers. Even so, there are still members of society who persist in their negative attitudes toward the handicapped. Like the ancient Spartans, they see only the outward impairment, not recognizing the inner potential.

The handicapped demonstrate every day, throughout their communities, that ability, not disability, counts. We need no minority or majority, but a united effort striving together for the good of all. Perhaps if we further this rehabilitation of society, history will record this decade as one of meaningful accomplishment in humanitarianism. We desire no greater epitaph. □



News From The Oklahoma State Department of Health

The Why of Immunizations

Each year, the Center for Disease Control has reported from some state, the death of a child, attributed to a childhood disease or a complication to a childhood disease. In this day and age, this is an *unnecessary* tragedy.

There are safe and effective vaccines licensed and available against all of the so-called childhood diseases of diphtheria, tetanus, pertussis, polio, measles, rubella and mumps.

Nationally, immunization levels in children 15 years of age and younger have declined to the point where if this trend is not reversed, there is an excellent possibility that this country may AGAIN experience outbreaks of diphtheria, polio and measles. The State of Oklahoma, with the Amended School Immuni-

zation Law, at least, has a better than 90 percent immunization level against these diseases for the over five-year-olds. However, Oklahoma does have a problem in the preschool population with much lower levels of protection against these diseases. Thus, it is incumbent on all departments, agencies, and individuals involved in the delivery of routine immunizations, to review all available records identifying those children with incomplete immunizations and attempt to return them to the health care system. By each individual, agency, or department conducting this review, our levels of susceptibles, as a whole, as well as potential pockets of susceptibles in given areas, can be reduced, thus; effectively stopping any potential outbreaks of these childhood diseases. It is hoped that in the future, these diseases can be totally eradicated from the environment of Oklahoma. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JUNE, 1978

DISEASE	June 1978	June 1977	May 1978	Total To Date	
				1978	1977
Amebiasis	—	—	3	18	9
Brucellosis	—	—	—	3	1
Chickenpox	—	58	—	—	902
Encephalitis, Infectious	1	2	1	10	8
Gonorrhea (Use Form ODH-228)	1300	1093	1196	6512	6219
Hepatitis, A, B, Unspecified	52	64	57	379	401
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	—	4	3	16	10
Meningitis, Aseptic	6	6	2	28	17
Mumps	—	34	—	—	446
Rabies in Animals	17	13	28	121	157
Rheumatic Fever	—	1	—	—	2
Rocky Mountain Spotted Fever	12	18	8	24	43
Rubella	2	1	—	11	27
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	—	2	3	12	52
Salmonellosis	25	40	34	126	98
Shigellosis	23	—	33	144	17
Syphilis, Infectious (Use Form ODH-228)	10	8	3	52	42
Tetanus	1	—	—	2	—
Tuberculosis, New Active	31	43	27	182	171
Tularemia	3	3	—	3	4
Typhoid Fever	—	1	2	2	1
Whooping Cough	2	1	—	8	3

Trustees Oppose Second Opinion Panels

The OSMA Board of Trustees voted at its August 5th meeting to support the general concept of second opinions or consultations for surgery, but to oppose consultations which interfere with the long-established doctor-patient relationship. Trustees unanimously approved a resolution which supports the patient's right to request a second opinion, but opposed any attempt by HEW or private insurance companies to establish second opinion panels which would be used in such cases. The OSMA resolution also opposes any attempt to alter existing ethical patient-physician relationships.

The resolution, which is shown below, was approved in response to current efforts by HEW and some private insurance companies to encourage patients to make more use of second opinions. In some cases private insurance companies have encouraged the formation of second opinion panels which would be made up of physicians selected by the insurance carrier without the authorization or approval of county or state medical societies. The OSMA has assisted patients in finding physicians to perform second opinions for many years, and has agreed to continue this service in the future. The Trustees, however, felt that the formation of separate panels was both unnecessary and unwise.

The resolution approved by the Trustees reads as follows:

The Board of Trustees of the Oklahoma State Medical Association supports the long-standing, medically-valid concept of consultations, or second opinions, when a valid doubt exists concerning correctness of diagnosis and/or appropriateness of therapy.

Regarding the necessity or value of consultations or second opinions, the attending physicians, the patient and/or the patient's family or legal guardian should be the people involved in making such decisions.

Any attempt by a third party to alter, in any way, the existing ethical patient/physician relationship regarding formulation of a mandatory second opinion is unwarranted interference in medical practice. Any attempt by a fiscal intermediary to influence a second opinion decision, by designation and payment of panel specialists for such second opinions, or to penalize the patient for not having or rejecting a second opinion, is condemned as a gross violation of the patient's right.

In other actions the Trustees also:

- Approved the report of the Executive Committee. OSMA President Dr Marvin K. Margo

reported that Dr Scott Hendren had resigned and had been replaced as an AMA delegate by Dr M. Joe Crosthwait, who was formerly an alternate. Board chairman Dr James B. Eskridge, III, has been appointed to fill the vacated alternate delegate position. Dr Margo also gave a report on the recent AMA meeting, announced that OMPAC had received an award for having all officers and delegates as sustaining members, and he reported on the state's Voluntary Effort. A resolution dealing with the Voluntary Effort was later approved by the Trustees and can be found later in this story.

- Received a membership report indicating that only 48 members were needed to reach the 3,000 mark. This is the sixth consecutive year in which OSMA members have increased.

- Received a report on the Billings Nurse Practitioner Satellite Clinic. The board voted to oppose the proliferation of independent allied health practitioners. It also referred this issue to the Council on Medical Services for further study.

- Received a report on the Oklahoma Utilization Review System and approved a rental-lease agreement between the OSMA and the OFPR. According to this agreement the OSMA will finance the construction of a new building to house the OFPR and the OFPR will lease this space.

- Received a report from the three AMA delegates . . . Dr Harlan Thomas, Dr Ed Calhoon and Dr M. Joe Crosthwait . . . on the St. Louis AMA meeting. Additionally, alternate delegate, Dr Orange M. Welborn, commented on HR 2222.

- Nominated Dr Hayden Donahue for the AMA Benjamin Rush Award and W. K. Warren for the Citation of a Layman for Distinguished Service Award.

- Approved a resolution from the Georgia Medical Association calling for the federal government to approve a balanced budget. This resolution calls for a constitutional amendment to that effect if necessary. The OSMA Council on Governmental Activities will now seek the Oklahoma legislature's approval of this resolution.

- Received a report on the status of physician advertising. According to a recent ruling by the Federal Trade Commission, opticians, optometrists and ophthalmologists may now advertise both goods and services. According to the same ruling ophthalmologists and optometrists are required to provide prescriptions to patients upon request.

- Reviewed the list of OSMA nominees to the University of Oklahoma College of Medicine's Board of Admissions.

- Received a report on the 1979 annual meeting from Dr Victor Robards. The meeting will be held May 3-5 at the Williams Center in Tulsa.

- Received a report from the OSMA Mental Health Task Force which studied allegations regarding Central State Hospital in Norman. This Task Force studied patient records on eight cases and found that no incidents of medical negligence or malpractice have taken place.

- Approved the following resolution endorsing the Voluntary Effort.

Whereas, The Oklahoma State Medical Association and the physicians of this state have long supported reasonable cost containment efforts which are in keeping with good medical practice; and

Whereas, The American Medical Association, the American Hospital Association and the Federation of American Hospitals, in recognition of the need to restrain the rate of increase in health care costs in a reasonable and effective manner, have organized a Voluntary Cost Containment Program; and

Whereas, In Oklahoma this program has received widespread support and has been effective in reducing the rate of increase of health care costs; therefore, be it

RESOLVED, That the Board of Trustees of the Oklahoma State Medical Association hereby endorses the Voluntary Cost Containment Program and congratulates all participants on the effective and reasonable manner in which this program has functioned; and be it further

RESOLVED, That the Board of Trustees hereby encourages all OSMA members to become active participants in the voluntary cost containment effort.

- Authorized OSMA staff to investigate the possibility of conducting an OSMA-sponsored tour in conjunction with the 1979 AMA meeting which will be held in Hawaii.

- Reaffirmed the OSMA's opposition to all forms of National Health Insurance. Trustees also referred the principles of the AMA plan to the Council on Governmental Activities for further review. □

Policy on Interest Charges Clarified

From time to time OSMA headquarters receives inquiries from physicians regarding the OSMA's and the AMA's position on adding interest charges on delinquent accounts.

The OSMA position coincides with that of the AMA Judicial Council which was established in 1962. This position has been reviewed several times since 1962, but remains as follows:

Since the practice of medicine is a profession and not a business, the practices adopted by businesses are not necessarily suitable to medicine. It is not in the best interest of the public or the profession to charge interest on an unpaid bill or note for professional services not paid within a prescribed period of time, nor is it proper to charge a patient a flat collection fee if it becomes necessary to refer the account to an agency for collection.

Despite requests to modify or rescind this opinion, the AMA Council has repeatedly refused to do so. The Council indicates that it has no information or data which would indicate that charging interest reduces the physicians's accounts receivable or materially changes patient's paying habits.

The Council points out, however, that it is not improper for a physician to add a service charge equal to the actual administrative cost of rebilling on accounts not paid within a reasonable time. Patients must be notified in advance of the existence of this practice. It should also be noted that physicians who choose to charge interest on delinquent accounts must fulfill the Truth In Lending laws. □

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CME Requirements Explained

By now most OSMA members are well aware of the requirements of the association's continuing medical education program. Each OSMA member must obtain a valid AMA-PRA Award each three years. This award requires 150 hours of continuing medical education credit in prescribed categories.

Few physicians, however, probably realize how many of their continuing medical education endeavors qualify as CME credit, and thus work toward the AMA-PRA Award. The following article identifies those activities and the categories under which they qualify. The article was originally run in the *Journal of the Medical Association of the State of Alabama* and was written by their Director of Education, George D. Oetting.

What's the first impression that comes into your mind when someone says, "CME?" Do you envision a large gathering of physicians seated quietly in neat rows of chairs, taking notes and carefully listening as an august professor from a nearby medical school presents a formal lecture — liberally illustrated with colored 35mm slides? Is this close to your impression? From talking to many physicians, I get the feeling that it is. CME means Category 1 "live" programs — right? Certainly this kind of education is an important part of your personal CME program; AMA requirements for the Physician's Recognition Award (PRA) stipulate that 60 of the 150 hours of CME over a three-year period must be Category I (40%). But how about the other 60%?

The rest of this article is a commercial for "those other categories" (2, 3, 4 and 5) which can be very effectively used in meeting 60% of your CME requirements. Attaining CME credit in these categories is both easy and difficult.

First, let's talk about the easy part. Many of you are involved in Category 2-5 CME activities and may not even realize it! To illustrate this, let us go quickly through these categories and do a little arithmetic along the way:

Category 2: CME activities of hospitals, medical societies, etc., which are not formally accredited for Category 1 CME (maximum allowable — 45 hours).

Do you attend a hospital staff meeting once a month where some sort of scientific program is presented? If you do, take credit for 36 hours in Category 2 for the three-year period.

Do you occasionally have scientific programs at your county medical society meetings or at your annual state specialty society gatherings? If you only attend three of these per year, take 9 hours credit for Category 2.

See how relatively painless this is? You probably have been doing these kinds of activities for years, but may not have related them to your CME requirements. Add these examples together for a total of 45 hours — almost one-third of your total CME requirements.

Category 3: Medical Teaching (maximum of 45 hours). You might think that this category only relates to medical school professors or learned visiting lecturers. Not so. Do you ever teach medical students or residents at your hospital? Have you ever presented a program for fellow physicians? How about training sessions you put on for nurses, medics, etc.? All these count for Category 3. I'll bet most of you do at least 5-10 hours over a three-year period.

Category 4: Papers, publications, books and exhibits (45 hours maximum). Let's skip this one since this kind of activity, though very beneficial, may not be as applicable to the majority of physicians.

Category 5: Non-Supervised Individual CME Activities (maximum of 45 hours).

Do you spend at least one hour per month reading scientific journals, books, etc.? If so, take credit for up to 22 hours of Category 5 CME.

Do you spend time in meetings, or programs, concerned with the review and evaluation of patient care — such as peer review, medical and chart audits, case conferences, PSRO meetings, tissue review, infections or death conferences? Take a maximum credit of 22 more hours of Category 5 CME for these activities.

Other hours for taking self-assessment exams and time spent learning from a consultant can also be credited here for Category 5.

Well, that's it — just crediting some of the activities which I feel would be usual for most physicians, will easily give you over a total of 90 hours — the other 60% needed to meet your CME requirements.

Now let's consider the difficult part. Keeping track of activities in these "other categories" can be difficult because you will have to do this yourself. No one will be issuing a fancy CME attendance certificate or computer printout for most of the Category 2-5 educational activities. In many cases, only you will know about the educational activity.

You will therefore need to develop some sort of personal system to record your participation in these activities. I would suggest that you start keeping a CME file to note these activities as they occur — do it as soon as possible, so you don't forget. Perhaps your secretary or office manager could provide assistance to you in this area. (*Editor's Note:* She should keep the PRA application form when it comes.)

These "other categories" are in a way, a statement by AMA and others, that physicians can learn and improve their medical skills in many different ways outside the formal classroom setting. The intense reading of a pertinent journal article or interaction with colleagues can be just as educationally beneficial; in fact, it may produce the best kind of learning. Therefore, we have Categories 2-5 — no less important than Category 1 in your personal CME program. □

National Health Expenditures Identified

A report released recently by the Department of Health, Education and Welfare indicates a number of interesting items concerning health

expenditures. The report for fiscal year ending June 30, 1977, includes the following information:

The nation spent \$163 billion for health care in fiscal year 1977. This amounts to \$737 for each person in the United States. In fiscal year 1977 spending levels for health care were 12% higher than those for the previous twelve months, while the gross national product increased by 10% during the same period. Thus, the health care share of the GNP increased from 8.7% for the year ending September, 1976, to 8.8% in fiscal year 1977.

Public spending represented 42% of all money spent for health care in 1977.

Expenditures for hospital care, including both inpatient and outpatient care in public and private hospitals represented 40% of total spending and reached \$65.6 billion in fiscal year 1977, a 14% increase over the previous year.

Spending for physician's services increased 13% in 1977, amounting to \$32.2 billion or 20% of total health spending.

For each person receiving Medicare benefits, Medicare spent \$1,422. For Medicaid each beneficiary received an average of \$753. □

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Task Force Completes Study

A special OSMA Mental Health Task Force appointed earlier in the year by President Marvin K. Margo, MD, reported its findings to a state legislative committee in August. The Task Force reviewed allegations brought against Central State Hospital in Norman and unanimously concluded that no incidents of medical malpractice or negligence had taken place in the eight specific cases it was asked to review.

The Task Force, chaired by Dr John A. Blaschke, Oklahoma City, was appointed at the request of the Special Committee on Health Care Delivery Systems of the Oklahoma legislature. They spent considerable time in reviewing patient charts of eight cases which the legislative committee felt questionable medical care was delivered. However, in its review, the OSMA Task Force was unable to identify any incidents of professional negligence.

Members of the five-man Task Force, in addition to Dr Blaschke, were Dr Charles E. Beck, psychiatrist, Dr Harold R. Belknap, internal medicine, Dr Jim Earls, psychiatrist, and Dr Arthur Schmidt, cardiologist. □

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Tulsa County Medical Society Awards Scholarships

Seventeen Tulsa area medical students will each receive an educational assistance award of \$500 from the Scholarship Fund of Tulsa County Medical Society. Total value of the annual cash grants is \$8,500.

With one exception, all are enrolled at the University of Oklahoma College of Medicine or the new OU Tulsa Medical College.

The Dr Anna Luvern Hays Memorial Scholarships, endowed by the Tulsa pediatrician who died in 1965, went to Phyllis A. Hampton, John R. Hood, Richard C. Irwin, Lance C. King, Fred Ock-Horn Lee, Bruce A. Kraemer, and Mark E. Munson, all from Tulsa.

Dr O. C. Armstrong Awards, established by the retired Tulsa family practitioner, were given to J. Patrick Walker, Mark A. Cremer, Gregory L. Hanna, and Terry F. Hayes, from Tulsa.

The Dr Frank L. and Jessie O. Flack Scholarship was given to W. David Holloway, Tulsa. It was created by Mrs. Flack in memory of her husband, Dr Frank L. Flack, a Tulsa surgeon who died in 1963.

The Glenda Ann Cale Memorial Scholarship was awarded to Deborah E. Davidson, Tulsa. This grant was established by physicians and friends in memory of a 23-year-old Southwestern Bell Telephone Company employee found murdered in 1972.

The Dr Maxwell A. Johnson Memorial Scholarship, named for the Tulsa urologist who died in 1971, went to Eric L. Cottrill, Tulsa.

An award in memory of Dr Margaret G. Hudson, school official who died in 1973, was given to Teresa M. Shavney, Sand Springs.

Two scholarships funded by the auxiliary to Tulsa County Medical Society were awarded to Beverly N. Balfour, Tulsa, and Susan L. Chambers, Tulsa.

Kraemer is a junior at Washington University School of Medicine, St. Louis, Missouri. Balfour, Cremer, Hampton, Hayes and Irwin are students at the O.U. Tulsa Medical College, and the others are at the University of Oklahoma College of Medicine in Oklahoma City.

The total of \$8,500 is the highest amount given since the establishment of the Scholarship Fund of Tulsa County Medical Society in 1963. The non-profit organization is supported by gifts and bequests from Tulsa physicians and lay friends. □



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State Commission Awards Rural Medicine Scholarships

Five Oklahoma medical students have been awarded Rural Medical Education Scholarships by the Oklahoma Physician Manpower Training Commission.

The scholarship awards are granted annually to qualified Oklahomans in medical and osteopathic physician training programs. Scholarship assistance for study during 1978-79 went to students at the University of Oklahoma College of Medicine, the Oklahoma College of Osteopathic Medicine and Surgery, and the Kirksville College of Osteopathic Medicine.

The Physician Manpower Training Commission and the Rural Medical Education Scholarship program was proposed by Governor Boren and enacted by the Legislature in 1975. The scholarships are administered by the Commission to provide financial assistance for future physicians planning to serve in rural areas of Oklahoma.

According to provisions of the state program, student physicians contractually agree to enter practice in Oklahoma communities under 7,500 in population in return for the scholarship aid.

The program was developed to relieve the shortage of physicians in rural areas of the state.

Commission chairman, Fred Cormack, Cherokee, announced the awards to the following: University of Oklahoma College of Medicine students — Michael Babb, Newcastle; Alecia Hanes, Yukon; Lance King, Tulsa; Gary Lawrence, Okmulgee; Kathy Lewis, Oklahoma City.

In addition to the 1978 recipients, 61 other undergraduate and graduate physicians have received rural medicine scholarships to provide primary health care in Oklahoma's smaller communities across the state. □

AMA MEETINGS SET

Annual Meetings

July 22-26, 1979	Chicago	Marriott Hotel
July 20-24, 1980	Chicago	Marriott Hotel
June 7-11, 1981	Chicago	Marriott Hotel

Interim Meetings

Dec. 2-6, 1978	Chicago	Palmer House
Dec. 2-4, 1979	Hawaii	Sheraton Waikiki
Dec. 7-10, 1980	San Francisco	Hilton
Dec. 6-9, 1981	Las Vegas	(Hotel not yet known)

Study Shows Fewer Recalls For Firms Committed to Research

Prescription drugs manufactured by companies with little or no investment in research are seven times more likely to be recalled from the marketplace by FDA than medicines produced by research-oriented firms, according to a Lilly study released last month.

The study, conducted by the company's corporate affairs research group, is based on FDA's published documents and on independent market research data.

The study looks at statistics concerning FDA Class I recalls (defective products that might cause serious health consequences) and Class II recalls (defective products that might cause temporary health consequences). It also analyzes FDA-initiated court actions (seizures of products, injunctions, and prosecutions), and an FDA summary of its Drug Problem Reporting Program. The study covers a four-year period from January 1974 through December 1977.

Analysis of the information, which took into account the relative volume of prescriptions, drug uses, and sales, shows that firms that are not research-oriented have at least:

- seven times more FDA recalls,
- forty-three times more FDA-initiated court actions against them, and
- one-and-one-half times more FDA Drug Product Problem Reports than those firms that maintain extensive research programs.

Release of the study was made shortly after an appearance by FDA Commissioner Donald Kennedy, PhD, at a meeting of the Association of Food and Drug Officials in Indianapolis. Kennedy told the officials that he strongly favors generic prescribing and encourages state substitution laws allowing or requiring pharmacists to substitute a less expensive, chemically equivalent generic drug for a brand name drug prescribed by a physician.

According to reports in *The Indianapolis News*, Kennedy said that "there has not been one piece of data provided by any [member of the pharmaceutical] industry that shows generic drugs are not as good as brand name drugs." A randomly selected generic product is no more likely to contain a defect, Kennedy claimed, than a randomly selected brand name product.

After release of the findings of the Lilly study, an FDA spokesman was quoted in *The Wall Street Journal* as saying, "Statistics can be made to show anything that you want the statistics to show." He said that the FDA's conclusion is that "on significant quality matters, there isn't any significant difference" between recalls on generic and brand name products.

The study points out, however, that if the three types of FDA enforcement activities were ranked according to serious consequences, the order would be: (1) court actions, (2) recalls, and (3) defects called to the agency's attention through the Drug Problem Reporting Program. "The relative incidence of each of these for research-intensive firms is in exact reverse order," the study says, "pointing to the conclusion that research-intensive companies' errors are not only less frequent than those of any other companies, but also that they are perhaps not as severe."

Emphasizing that the substitution issue is one of quality and not necessarily a question of brand vs. generic drugs, the study concludes that higher quality drug products are produced by companies committed to research. These are the companies that have more assets — both in equipment and buildings and in highly specialized and technically oriented employees. "The human and capital assets of research-intensive companies," the study asserts, "contribute directly to the quality of prescription drug products. They expedite the introduction of new and innovative techniques, they allow a greater number of resources to be devoted to quality testing, and they result in drug products of the highest possible quality." □

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Socialized Medicine in England Accepting US Business' Role In British Health Care

Socialized medicine in England is accepting the offer of American business to help solve some health care problems, according to an American company operating there.

"In the areas of providing private care and in dealing with backlogs of surgery patients, the British are increasingly accepting private sector help. At the same time, there is a thriving private health insurance market in this nation of free government health care," according to American Medical International (AMI) president Royce Diener. "The most recent example is the admittance on August 8 to an AMI London hospital of a National Health Services cardiac patient from Liverpool," Diener said.

In the past 18 months, 20 people have died awaiting cardiac surgery in the Liverpool area — where there is only one cardiac unit for 1.2 million people. The current waiting list for surgery is more than 100 cases, with 70 of those already waiting more than nine months.

"AMI is providing free of charge to the most severe cases a cardiac unit bed in the company's Harley Street Clinic, London, and another in St. Anthony's Hospital, Cheam, which AMI manages for a Catholic order. At the same time, a group of eminent British heart specialists — including Donald Ross, who performed England's first heart transplant — have joined AMI by offering their services free to these patients.

"This means that many patients who otherwise might have waited too long for surgery will receive immediate, free care that is among the finest in the world. It also means the National Health Services backlog should ultimately be cleaned-up," Diener said.

He added, "Such generosity would be less noteworthy were the giver not private enterprise and the receiver not socialized medicine.

"A further example is AMI's recently approved Manchester hospital project, the first new private hospital to be approved by the recently established National Health Services Board. AMI is developing this hospital on the request of 100 Manchester-area specialists as a result of the systematic elimination of private care wings in government hospitals.

"This kind of demand is occurring throughout the UK and has resulted in other AMI projects at varying stages of development, two of which

will be announced within several weeks," Diener added.

"In addition, AMI last year opened the 137-bed Princess Grace hospital in London and entered into contracts with Holland and Norway to treat cardiac patients flown to London from those countries," he noted.

AMI, an international health services company, owns and manages facilities in the United States and overseas and provides approximately 50 health care services to 400 communities on five continents. □

Arkansas-Oklahoma Cancer Forum Scheduled in Fort Smith

The Arkansas-Oklahoma Cancer Forum will be held at the Sheraton Motel in Fort Smith, Arkansas, on September 28 and 29, 1978. This is sponsored by the Arkansas and Oklahoma Divisions of the American Cancer Society. The program will be devoted to a discussion of common cancer encountered in most medical practices. Case presentations and discussions will be used extensively. Additionally, there will be an update on recent diagnostic advances.

The forum will open with a brief review of the history of the fight against cancer. Site oriented topics to be discussed on the 28th will include: non-melanotic skin cancer, lung cancer, and breast cancer. The presentations will stress current problems in each area.

On the morning of the 29th the program will be devoted to recent advances in oncology. The first session will feature discussions of the role of some new diagnostic aids in patient-management including ultrasound radionuclide scanning, tumor markers, and the CAT scanner. Recent advances in gynecologic, urologic, and pediatric oncology will be presented.

The afternoon session on the 29th will be a program for oncology nurses. It will stress new developments in nursing oncology which are important in optional patient care.

Additional information and registration forms may be obtained from Herb Truxton, Professional Education Director, American Cancer Society, Arkansas Division, 5520 West Markham, Little Rock, Arkansas 72203 501-664-3480 or Paul McDaniel, Executive Vice-President, American Cancer Society, Oklahoma Division, 1312 N.W. 24th Street, Oklahoma City, Oklahoma 73106.

Legal Briefs

The following fictional scenario illustrates a problem which is occurring in Oklahoma since the Supreme Court ruling that an injured workman may sue his treating physician and there is no longer any "immunity" from suit in an industrial case.

SCENARIO:

Ivan Heretelot developed pain in his low back while on the job. He went to his family doctor who referred him to an orthopedic specialist with his employer's blessing. He was diagnosed as having a low back strain and appropriate therapy was instituted. While off work he was paid temporary total disability compensation by his employer's workers' compensation insurance carrier. After achieving maximum healing, the attending physician dismissed Ivan to return to work with no permanent partial disability.

Now, Ivan didn't feel that this was fair. He should have some money. After all, while he was off work, he had not been able to make all his various installment payments on the mere pittance paid him by the insurance company.

So, Ivan went to his family lawyer, Oliver Wendall Shylock. Mr. Shylock agreed that Ivan had been treated unjustly by the industrial establishment and promptly referred Ivan to another orthopedist for examination and report (after explaining to Ivan the significance of some of his symptoms). Oliver also filed a claim for Ivan before the State Industrial Court. Oliver's examining physician wrote a report explaining that Ivan was in need of surgery to stabilize his low back; that without the recommended surgery he had 25% permanent partial disability to the

body as a whole; but that this would be improved with the surgery. Ivan went ahead and had the surgery. The insurance carrier ultimately paid the medical and hospital expense. Then the case came on for hearing on the question of permanent partial disability before the State Industrial Court.

In defense of the claim, the insurance company lawyer took the deposition of the original orthopedist. He testified that Ivan did not need the surgery at all. Without the surgery, Ivan had no disability whatever. However, now that he had had the surgery, he had some limitation of motion in his low back and Ivan now had 10% permanent partial disability to the body as a whole. The operating surgeon opined that he had achieved a good result, but did agree on the amount of disability. The Industrial Court then made its award to Ivan.

Since there is no longer any immunity from suit in workers' compensation cases for treating doctors, Ivan and Shylock have now brought a suit against the operating surgeon. They allege that:

1. Ivan did not need the surgery on his low back.
2. Ivan's consent for the surgery was fraudulently obtained.
3. The surgery itself has now left him with 10% less of his earning capacity for the rest of his working life resulting in damages of one million dollars.

Mr. Shylock now points out that he has an expert witness who has already so testified in a judicial proceeding. Thus, he has no problem whatever in obtaining an expert witness to support Ivan's claim. □

Short, Barnes, Wiggins and Margo

American Cancer Society

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New AMA Delegate Appears Near

According to the latest membership figures, the OSMA needs fewer than 50 new members to reach the 3,000 member figure and thus receive a fourth AMA delegate. AMA delegates are granted on the basis of one for each thousand members or fraction thereof. As of July 27, OSMA membership figures stood as follows:

Regular Members — 2,372

Affiliate Members — 11

Life Members — 211

Junior Members — 212

Pending Members — 146

Total — 2,952

Total non-members — 637

OSMA members are encouraged to help in the membership drive by encouraging non-member colleagues to become part of organized medicine. □

Tulsa Pediatric Colloquy Set For October

The fourth annual Tulsa Pediatric Colloquy, "Pediatric Allergy, Immunology and Dermatology for the Practitioner," will be held October 13 and 14 in the auditorium of Children's Medical Center, Tulsa.

Dr Daniel C. Plunket, Dr Leon Horowitz and Dr Christopher Gifford are the course directors.

The guest faculty includes Dr Joseph A. Belanti, professor of Pediatrics and Microbiology, Georgetown University Medical Center, Washington, DC; Dr William A. Daniels, Jr., professor of Pediatrics (Adolescent Medicine), University of Alabama School of Medicine, Birmingham, Alabama; Dr Arthur L. Norins, professor and chairman of the Department of Dermatology and professor of Pathology, Indiana University School of Medicine, Indianapolis, Indiana; Dr Miles Weinberger, associate professor of Pediatrics and Pharmacology, University of Iowa, Iowa City, Iowa; and Dr William L. Weston, assistant professor of Medicine (Dermatology) and Pediatrics, University of Colorado Medical Center, Denver, Colorado.

Dr Daniels will be the guest speaker at the colloquy banquet at 7:30 p.m., October 13 at the Sheraton Inn-Skyline East. His topic will be "Mid-O-Lescence."

Faculty members from the University of Oklahoma Tulsa Medical College are Dr Robert W. Block, associate professor of Pediatrics, and Dr Bernard Robinowitz, clinical assistant professor of Medicine (Dermatology).

Dr Susan E. Farrell, assistant professor of Pediatrics at OU-TMC, will discuss "The Educational and Legal Rights of Children" during a special luncheon program for wives.

The conference carries 13 hours of Category I credit of the Physician Recognition Award of the American Medical Association and is acceptable for 13 hours by the American Academy of Family Physicians.

A \$30 fee for the program includes lunch both days.

The colloquy is sponsored by the OU Tulsa Medical College Department of Pediatrics, the Oklahoma Chapter of the American Academy of Pediatrics and Children's Medical Center in association with the Tulsa Area Health Education Center.

For additional information, contact the TAHEC office, 2727 E. 21 Street, Suite 107, Tulsa, Oklahoma, 74114, or call, 918/749-5531. □

Former Executive Director Dies

Richard H. Graham, who served as executive director of the Oklahoma State Medical Association from 1938 to 1962 died last month in Oklahoma City. Graham, 69, served as the OSMA's executive director after moving to Oklahoma City from Kansas. The Peabody, Kansas, native attended the University of Kansas and was a member of Alpha Tau Omega social fraternity. A World War II Army veteran, Graham was a 32nd degree Mason and a Shriner.

His survivors include his wife, Isabel; a son, Richard H. Jr., Edmond; and three grandchildren. □

Remember These Dates . . .

May 3-5, 1979

OSMA

ANNUAL MEETING

Williams Plaza Center

Tulsa, Oklahoma

Book Reviews

COSTS, RISKS, AND BENEFITS OF SURGERY, J. P. Bunker, B. A. Barnes and F. Mosteller, Editors, 401 pages with illustrations, New York, Oxford University Press (1977), \$22.50

This book, according to the Preface, is written for physicians and surgeons, public health planners, policy analysts, faculty and students of medical schools and members of legislatures and their staffs, and others who ask, "How can we get the most from the resources we allocate to medical care?" As a start at providing answers to this question, the 34 contributors from various fields have examined selected areas of surgical practice and research using the methods of cost-benefit analysis and drawing heavily from the decision analysis, statistics and economic theory. The book aims to clarify their being rather than merely be critical.

The book is an outgrowth of the activities of the Harvard Center for the Analysis of Health Practices and its Department of Statistics, which in 1972, seeking to promote interaction between physicians and other professionals in order to improve the medical care process, joined to establish an interdisciplinary seminar in health and medicine. The practice of surgery was chosen for analysis because of the attendant costs, risks and benefits which are associated with profound moral, as well as economic, implications not only for the patients and their families, but also for administrators and others responsible for providing the institutional environment.

In defining the nature of the problem, the authors point out that the costs of medical care have accelerated rapidly but the apparent improvement in the traditional indices of the health of the public in recent years has been modest. The national expenditure in the United States for health care in 1975 was \$118.5 billion, an increase of 10% over 1974, thus totally 8.3% of the gross national product. Per capita this amounts to an expenditure of \$547.00 or about 10% of the average personal income. For comparison, the shares of the gross national product in the federal budget allotted to national defense, education and veteran benefits and services are, respectively, 5.6, 1.2 and 1.0 percent. With expenditures at this level the public and its representatives in Con-

gress naturally want to know what they receive in return — that is, how much do these large expenditures improve health. Important deficiencies in various dimensions of surgical practice have become increasingly apparent. What are the effects of surgical intervention on the quality of life and for life expectancy? — This is the central question posed in various sections of this book.

The book is divided into five parts. The first part, "Background and General Principles," introduces the methods of conditional probability, decision trees and economic analysis. A listing of the titles of the seven chapters in this section will give some indication of the flavor of the content: 1. General principles: cost-benefit and decision analysis; 2. Cost effective clinical decision making: implications for the delivery of health services; 3. The issue of social costs in cost-benefit analysis of surgery; 4. Heterogeneity among patients as a factor in surgical decision-making; 5. Cost-benefit analysis of surgery: some additional caveats and interpretations; 6. The value of diagnostic aids in patients with potential surgical problems; 7. On the incidence of tonsillectomy and other common surgical procedures.

The second section, "Surgical Innovation and Its Evaluation," shows historically that many surgical procedures were devised in the past on the basis of intuition and the insight of particular individuals. Barnes reviews the history, almost incredible in some instances, of operations for ptosis of abdominal organs, for constipation and for other disorders; fortunately most of these operations have been discarded. Before 1945 the concept of control in evaluation of methods seemed totally unknown to most surgeons.

A third section of the book assesses the risks and benefits of established surgical procedures by decision analysis. For example, the value of elective inguinal herniorrhaphy is critically assessed, as is life expectancy after cholecystectomy for silent gallstones and after hysterectomy for uterine disorders. While the indications for inguinal herniorrhaphy are generally agreed on, it will come as a surprise to many to learn from the analysis given that there is considerable doubt of the life-saving efficacy of the operation as performed in the elderly. Wisely, the author suggests that the unchallenged status of the operation is based on its effectiveness in improving the quality of life, rather than the quantity of survival of the

patient. Fitzpatrick and colleagues have analyzed the incidence and prevalence of cholelithiasis and the difference in cholecystectomy rates in different countries, regions and states in the US. These analyses clearly show that the marked difference in frequency of cholecystectomy (for example, 4.9 per 10,000 population in England and Wales in 1967 versus 18.5 in the US in 1971) reflects patterns of health care utilization more than the prevalence of gallstones in the population.

The National Center for Health Statistics estimates that 690,000 hysterectomies were performed in 1973 in the US. This represents a rate of 647.7 per 100,000 females, a rate higher than that for any other major operation, and a rate which, if continued in the future, would result in loss of the uterus by more than half the female population by age 65. How many of these operations were carried out for standard, conventional indications is not known, "but it has frequently been alleged that hysterectomy is carried out unnecessarily in many patients." A major basis for this concern is the larger variation in rates for hysterectomy in different populations. Hysterectomy rates in the US and in Canada are more than double those in Great Britain. The authors conclude that there are no data on what proportion of women were benefitted by elective hysterectomy, but the operation does not increase life expectancy more than two to four weeks, and the costs are large. Throughout this section is discussion of various operative procedures. The difficulties of cost-benefit analyses in surgical decision making are pointed out.

The fourth section is entitled "Assessment of Costs, Risks, and Benefits of New Procedures." ". . . we invent new treatments faster than we can assess them and — for the first time — in excess of our ability to pay for them." As a result, we are faced with ethical, economic and professional problems of a magnitude never before encountered. The authors of this section have provided us with some intriguing analyses of the dilemmas caused by the appearance on the medical scene of certain of these new and extremely costly procedures. The surgical treatment of end-stage renal disease and of coronary artery occlusion, illustrate many of the issues at hand — each involves exceedingly large costs in suffering and dollars for patients and their families, and in dollars to society. The conflict between the interests of society and the individual points to

the need for national planning. In regard to end-stage renal disease, several pertinent questions are posed: How large will the patient population grow? What are the relative contributions made by the major therapies? What are the implications of national planning and support of costs? A model was constructed which indicates that between 52,000 and 60,000 patients will be in treatment at the end of the tenth year from a given starting point at an annual cost of \$700 to \$800 million. The data show, in general, that coronary artery bypass surgery is not an efficient utilization of scarce health resource funds. An estimate is made of the premium that might be paid each year by American men to insure that they could receive coronary bypass surgery should this be necessary. The premium would range from \$20 to \$45 yearly to achieve 0.5 years of increased life expectancy. The authors comment that coronary bypass surgery may be a perfect example of what has been referred to as the dilemma of the medical "commons" — what is optimum medical care for the individual patient may not be optimal when we, as society collectively, consider what it is costing us.

An implicit central consideration is the value of a human life. This issue is explicitly considered by Bendixan in the context of the modern intensive care unit, where the cost of treatment for a discrete and identifiable period of time can be matched to the life expectancy of the salvaged patients. He cites a variety of different examples. Thus, for the young patient treated for barbiturate overdosage, but in previous good health, the intensive care cost may be as low as \$100 for each year of life expectancy; whereas for the middle-aged alcoholic suffering from liver and kidney failure, the intensive care costs are estimated to be \$100,000 or more for a year of additional life. Between these two extremes there is a full spectrum of patients whose lives may be saved at greater or lesser expense and with greater or fewer years of life expectation. However great the anticipated expense, the individual physician caring for such a patient has only one choice: "to make every effort applying all available resources, until convinced that the battle has been lost." And yet, at the same time, the physician, as a member of society with special knowledge, must also participate in the decision to limit programs and facilities when the cost-benefit ratio is less than favorable than for competing programs.

Since this book points out that society no longer has the ability to pay for all the medical care that may be provided, recommendations are made in the final summary section. They have to do with performing appropriate studies of the effectiveness of surgical treatments; policies should be developed for studying new medical and surgical technology; and physicians, themselves, must be better educated in analytic technique to discriminate among therapeutic techniques.

The final four recommendations are reproduced for the interest of the reader. Recommendation 1: Appropriate studies of the effectiveness of surgical treatment should be carried out for selected conditions, particularly those where uncertainty leads to professional disagreement; Recommendation II: Our grasp of the components of cost-benefit analysis and their interrelations, the values of the various data gathering techniques, and our understanding of the ethics of data gathering must be improved by theoretical and empirical work and by continued discussions in the public forums; Recommendation III: These principles of cost-benefit evaluation should be included as an integral part of the medical school curriculum; and their application to the assessment of the efficacy of medical care should be incorporated into clinical practice and continuing medical education; Recommendation IV: Information on outcomes as well as costs of medical care should be routinely formulated in a manner suitable for presentation to the public.

With so much attention being given to the quality of medical care throughout the world, this critique of surgical practice is very timely. Life expectancy has continued to increase, but we do not know how much of this increase is the result of elaborate and costly medical care, and how much is the result of other factors, such as improved housing, improved nutrition, or lessening of habits deleterious to health. Although a large proportion of medical expenditures are very properly intended to improve the quality of life rather than its duration, there are no reliable data which reflect to what extent quality has been significantly advanced.

At the outset of this book, the authors pose the question, "How can we get the most from the resources we allocate to surgery?" In surgi-

cal management, there are clearly defined end-points such as operation and non-operation, life or death, and the authors have obtained from the literature reasonable estimates of the probabilities of each of these outcomes from a wide range of conditions, together with the possible benefits, risks and costs to the patient. The contributors have examined attributes of a surgical procedure; the medical benefits it provides, the risk to life and health, and the resources it uses. They have done so in a thought-provoking manner. All readers may not agree with the conclusions reached by each author on a particular type of treatment; they are, however, always interesting. Despite the hard-hitting nature of much of the material, there is compassion revealed in many of the chapters. No physician can be insensitive to the penetrating analyses and points which are made. The book is not an easy one to digest. The mathematical equations which appear early are formidable. If the reader will not be discouraged by these features, he will find a wealth of pertinent and timely material. This book could well become a standard reference source on how problems of cost-effectiveness in health care can be approached. It should be read by all concerned with this enormous field including physicians, administrators and others responsible for the delivery of health care. It certainly should be in the personal library of every operating surgeon. *Harris D. Riley, Jr., MD.*

MEDICAL MICROBIOLOGY — THE PRACTICE OF MEDICAL MICROBIOLOGY, 12th Edition, Vol. 2, Robert Cruikshank, et al, 587 pages, Churchill-Livingstone, Edinburgh, (1975), \$32.50.

Despite the subtitle of "The Practice of Medical Microbiology," the first third of this book is devoted to basic subjects to which most students have been exposed prior to medical or graduate school. This includes a very basic discussion of the microscope, sterilization, disinfection, media preparation, and serologic procedures. Little of this is necessary in a textbook of this type. The authors do not begin a discussion of medical microbiology until about midway through the book.

Generally speaking, the bacteria which may cause disease in man, as well as pathogens in

(Continued on Page xii)

Let's Don't Negotiate

Physicians who engage in the practice of medicine must also engage in the practice of compromise. The successful treatment of patients — individual human beings with one or more infirmities — requires the development of compromises between the ideal and the practical in every category of clinical medicine. As they affect the welfare of patients, the best compromises evolve from the most comprehensive negotiations between patients and physicians. It is understandable, therefore, that physicians rather readily agree to participate in negotiations especially those designed to establish and define compromises.

Fortunately most physicians refuse to compromise their professional integrity, ethics, morality and convictions. However, it is remarkable how willingly they participate in negotiations which threaten to — and actually often do — compromise their professional integrity. The devious road to state medicine is littered with evidence of our profession's total subjugation as a result of our willingness to negotiate, almost indiscriminately, propositions which are designed to compromise our morality and ethics. Our greatest wounds are not suffered in the process of negotiation itself but in our failure to recognize those issues about which we should refuse to negotiate.

Characteristically we announce our refusal to compromise and our willingness to negotiate almost simultaneously.

Certainly, the hour is late but if we are to salvage a particle of professionalism or a

breath of freedom — we must recognize the suicidal effects of indiscriminant negotiations and refuse to participate.

Currently, our moth-like reaction to the flame of negotiation is being elicited concerning elective surgery second-opinion propositions. To participate in such negotiations is to yield. To participate is to agree that the patient should be less free to select and accept the advice of his physician; that it is unwise for a patient to depend upon a single physician for his medical care; that our patients' right to have a recommended elective surgical procedure should be questioned or abrogated; that hospital staff members who serve on professional regulatory committees are dishonest, mercenary or ineffective; that a corporation can control a physician's choice of consultants without assuming full, legal liability for the results of such consultation; that it is consistent with ethical, professional conduct for a physician to accept a lesser fee from an insurance company that he customarily expects from patients (in effect—fee-splitting the premium); that the successful completion of an examination years ago certifies the competency of a physician today — or guarantees professional qualifications in the first place; and, finally, to participate in such negotiations is to admit that, properly enticed, we will build our own scaffold, supply the rope, provide the hangmen and dig our own graves.

If you prefer intravenous execution, I'm sure we can negotiate a mutually acceptable compromise.

MRJ

'Tis the political season.

Like me, most of you are probably already tired of the political season. Like old summer reruns, you see the same political announcements paid for by the same friends of the same politicians over and over again. These same announcements about the same politicians paid for by the same friends in many cases offer the same promises. This year it's less government and lower taxes. Last time it was more services. And who knows what it will be the next time.

It's easy to become disenchanted with politics. It's just as easy to develop a don't care attitude. It's easy to do these things, but we really shouldn't.

Like it or not medicine is now practiced in a political arena. In the past ten years government has encroached into more areas of medical practice than anyone could have imagined. Government is in the insurance business, they are in the regulatory business, they tell us where we may build hospitals. To some degree they tell us what type of medicine we may practice, and if we are not careful, government may very soon tell us where we may practice.

Politics is a fact of life, and doctors must learn to work within the political system. At the AMA meeting this summer I received an



award on behalf of our Association from the American Medical Political Action Committee. All of our delegates and officers are sustaining members of the Oklahoma Medical Political Action Committee. Unfortunately, however, the majority of OSMA members do not belong at all.

This year the political races have some very clear-cut choices. Some of the candidates are friends of medicine who would work locally and nationally to defend our profession and the free enterprise system. Others are not so friendly and would be more inclined to work against medicine and against the philosophy upon which our system was founded.

OMPAC is in the midst of a membership drive, and I encourage each OSMA member to work for free enterprise medicine through the State Medical Association and through OMPAC. During the primary elections OMPAC contributed approximately \$14,000 to help support political candidates, and they came up winners in 28 out of 30 primary races. I think this speaks well of their organization and of their chairman, Dr Orange M. Welborn.

It is unfortunate that the future of medicine in this country depends upon the decisions of government rather than the abilities of men. It is a fact, however. Please help preserve the future of medicine by joining OMPAC and by becoming involved in the political process.

Marvin K. Margo M.D.

Ultrasound Evaluation of Pancreatic Disease — The State of the Art

DON A. WILSON, MD
H. GRADY DANIEL, MD

Pancreatic disease, an elusive diagnosis in the past, can now be determined with 85% accuracy employing the latest ultrasound techniques.

INTRODUCTION

Because of the relative inaccessibility of the pancreas, the specific diagnosis of pancreatic disease is frequently elusive. Numerous diagnostic modalities are available to aid the clinician. The routine upper gastrointestinal series is the screening procedure most commonly obtained. This exam is only about 60% accurate in pancreatic disease.¹ The hypotonic duodenogram improves accuracy to about 75% but is useful only in evaluating the head of the pancreas. Endoscopic retrograde cholangiopancreatography (ERCP) is reasonably accurate but is uncomfortable for the patient and complications have been reported in cases of pancreatic inflammatory disease.^{2, 3} Radionuclide studies of the pancreas can usually distinguish between normal and abnormal tissue but are not of value in differential diagnosis. Angiography is invasive and has about an 80% accuracy rate in pancreatic disease.⁴ Computerized tomography

(CT) is a promising technique, however, it is costly and exposes the patient to significant radiation dosages. The CT scan may not be successful in very thin patients because of the absence of fat planes.⁵ The diagnostic ultrasound scan is very useful in evaluating pancreatic disease and is suggested as the primary screening procedure.

Since the advent of the gray scale scanner, abdominal "B"-mode ultrasound examinations have become a reliable diagnostic tool. The study is easily performed without patient discomfort and utilizes a harmless high frequency sound beam to detect and image the various tissue interfaces. Little patient preparation is required; however, since overlying bowel gas does interfere with adequate imaging it is advisable to restrict oral intake for six to twelve hours prior to an examination. Barium within the bowel will also preclude an adequate study so ultrasound should be obtained prior to barium studies.

The pancreas which has heretofore been a rather difficult organ to image, can be seen in over 80% of normal patients on the newer equipment. The gland is a retroperitoneal organ, oriented in an oblique plane in the abdomen approximately parallel to the patient's right costal margin. The landmarks used to identify the pancreas are the abdominal blood vessels. On transverse ultrasound scans the normal pancreas appears as a thin strip of tissue just anterior to the splenic vein, portal vein and the superior mesenteric artery. (Figure 1) The average thickness of the gland is about 8 mm.⁶ On longitudinal scans the organ is seen immediately anterior to the aorta and superior

From the Department of Radiology, Oklahoma University Health Sciences Center, Oklahoma City, Oklahoma

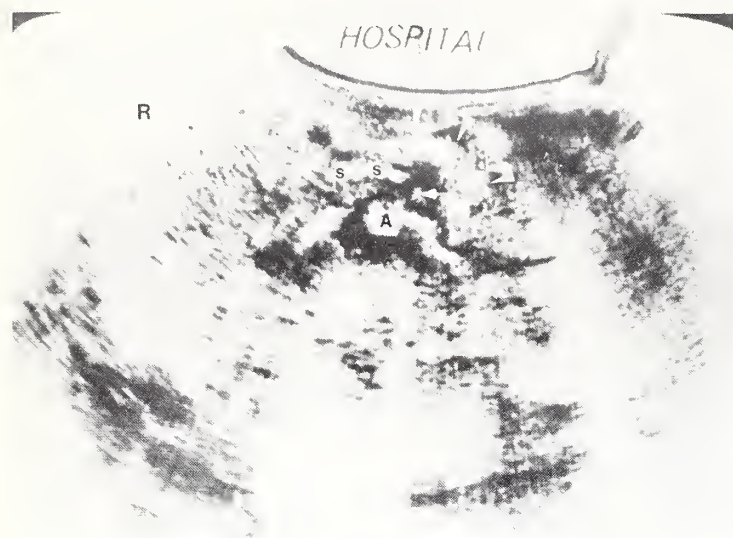


Figure 1: Transverse ultrasound scan 2 cm below xiphoid shows the normal pancreas (arrow heads), superior mesenteric artery (small arrow), aorta (A) and splenic vein (S). R = right side of patient.

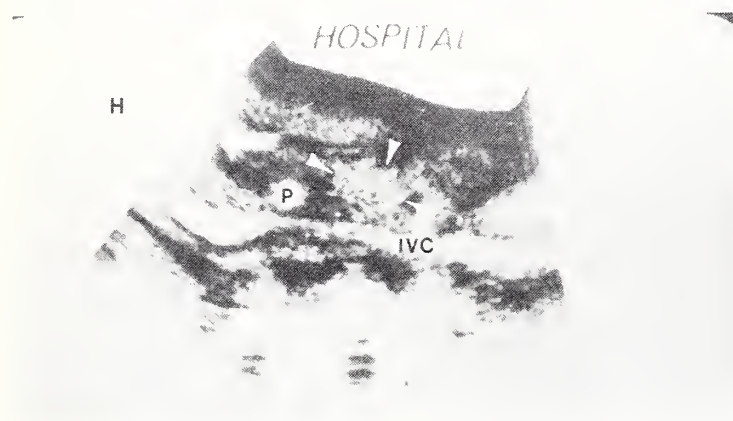


Figure 2: Longitudinal ultrasound scan 2 cm to the right of midline shows normal pancreas (arrow heads), portal vein (P) and inferior vena cava (IVC). H = direction of head of patient.

mesenteric artery or inferior vena cava. (Figure 2) The normal pancreas usually contains more internal echoes than the adjacent liver, but fewer echoes than the surrounding connective tissues.

The diseased pancreas is even more readily identified by ultrasound examination than the normal gland. In the case of acute pancreatitis the organ is diffusely enlarged with an average thickness greater than 12 mm.⁶ The gland contains fewer internal echoes than normal pancreatic tissue. (Figure 3, 4) Because of this decrease in echo content the distinction between the pancreas and the splenic or portal vein may be lost.

Pseudocyst of the pancreas is very accurately diagnosed by ultrasound. The usual presentation is that of an echo-free space of variable size and shape adjacent to the pancreas. Some internal echoes are occasionally returned from

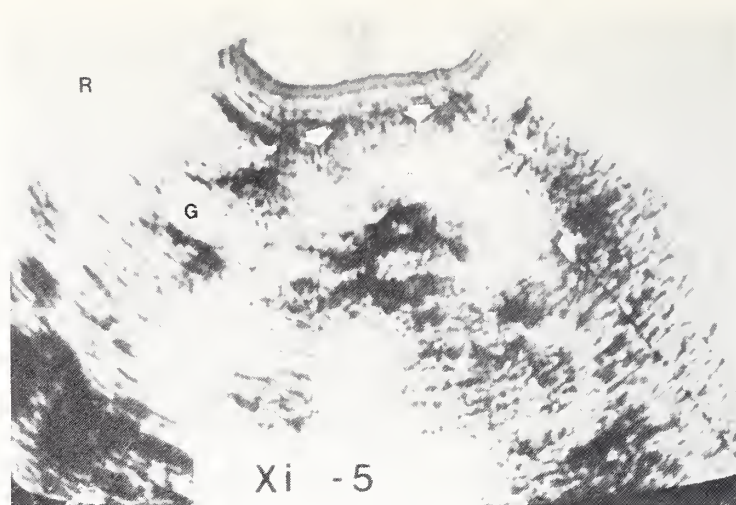


Figure 3: Transverse ultrasound scan 5 cm below xiphoid shows a diffusely edematous pancreas (arrows). Distinction between portal/splenic veins and pancreas is lost. These findings are characteristic of pancreatitis. G = gallbladder. R = right side of patient.

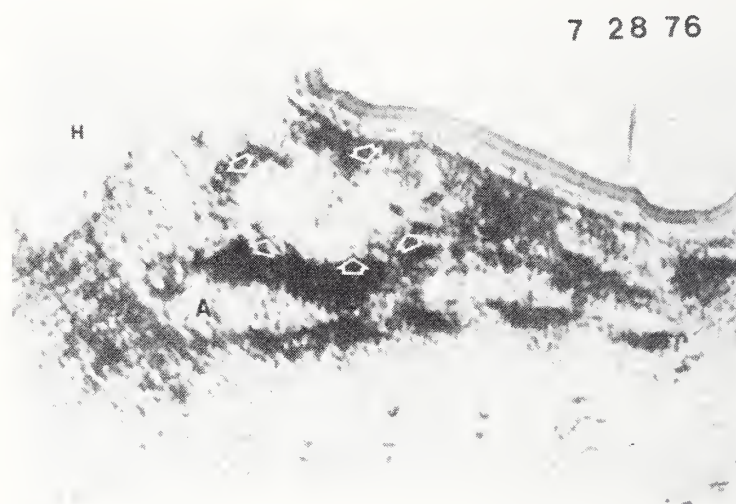
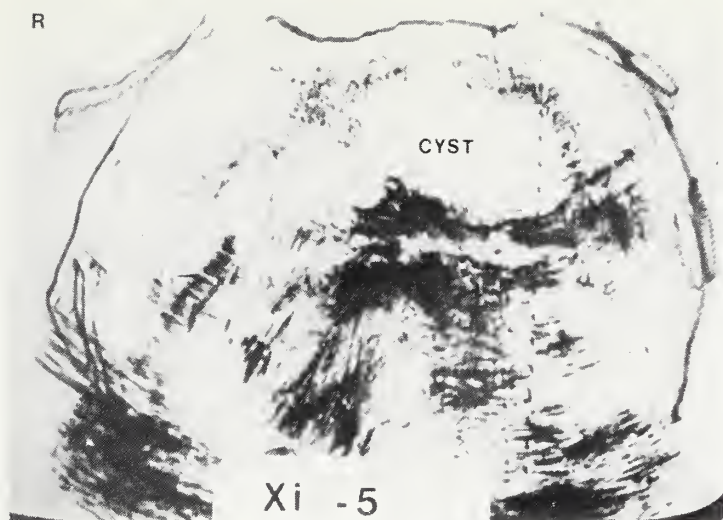


Figure 4: Longitudinal ultrasound scan of pancreatitis (arrows) aorta (A). H = direction of head of patient.

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Certified by the American Board of Radiology, H. Grady Daniel, MD, was graduated from Emory University School of Medicine. He is now assistant professor of the Department of Radiology at the University of Oklahoma Health Sciences Center. Among his medical affiliations are the American College of Radiology and the American Institute of Ultrasound in Medicine. Dr Daniel is also in private practice in Oklahoma City.



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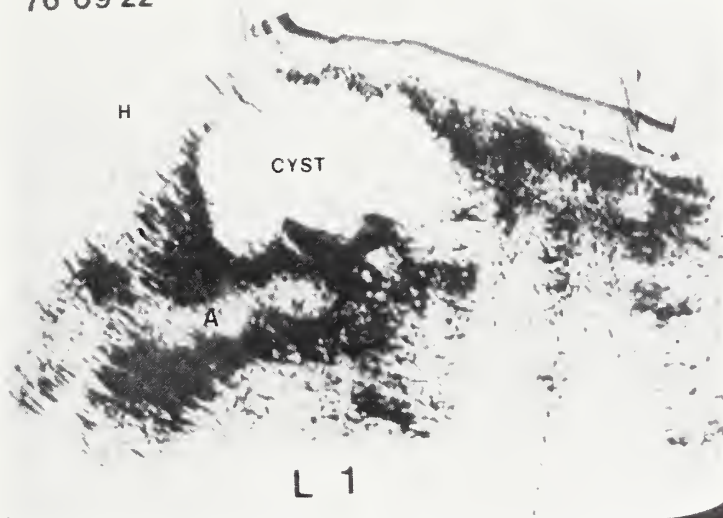


Figure 5, 6: Transverse and longitudinal ultrasound scans of a pancreatic pseudocyst (cyst) R = right side of patient. H = direction of head of patient.

cellular debris which layer out in the more dependent portions of the cyst. As is characteristic of all cystic structures imaged by ultrasound, the margins are sharply defined and there is good through-transmission of the sound energy. (Figure 5, 6) Spontaneous drainage of a pancreatic pseudocyst is a well known occurrence.⁷ Serial ultrasound studies provide an excellent means of documenting this phenomenon as well as showing recurrence or growth of the pseudocyst.

Carcinoma of the pancreas is also imaged by ultrasound. The usual presentation is a focal mass lesion with irregular borders and internal echoes. (Figure 7) The tumor usually absorbs more of the sound energy than a comparable mass of inflammatory tissue.

Unfortunately, the distinction between carcinoma and pancreatitis can sometimes be very difficult. Pancreatitis may also present as an irregular, localized mass with internal echoes.

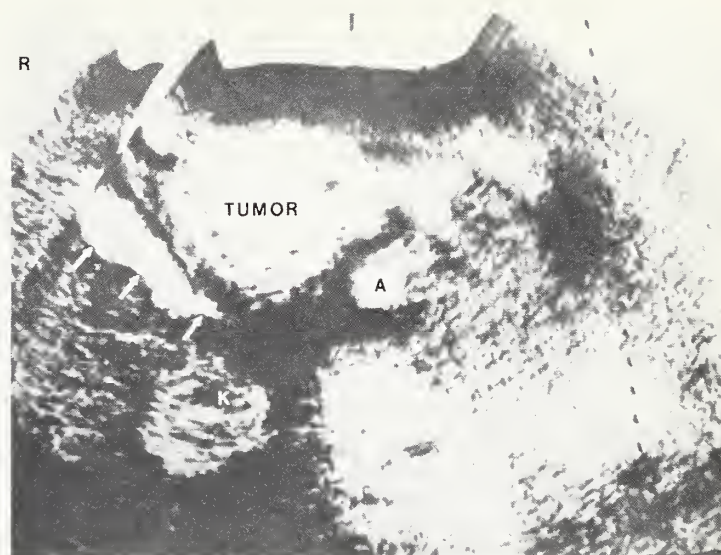


Figure 7: Transverse ultrasound scan of a pancreatic carcinoma (tumor) and dilated common duct (arrows) aorta (A), kidney (K). R = right side of patient.

If there is obstruction of the biliary tree the diagnosis of carcinoma is favored. Pancreatitis and carcinoma can coexist in the same organ thereby further confusing the issue. Even so, the overall diagnostic accuracy of ultrasound in the evaluation of pancreatic disease is between 80-85%.^{4, 6}

SUMMARY

Gray scale abdominal ultrasound scanning provides a safe, non-invasive, and reliable technique for evaluating an organ which is otherwise relatively inaccessible. The procedure is well tolerated by the patient and serial studies provide an excellent method for following the evolution of pancreatic disease.

ACKNOWLEDGEMENT

The authors are indebted to Ms. Dickie Price for assistance in preparing this manuscript. □

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Concurrent Hyperthyroidism and Hyperparathyroidism

Report of Two Cases

JAMES L. MALES, MD
DAVID C. KEM, MD

Two cases of coexisting hyperthyroidism and hyperparathyroidism are presented. The coexistence of these two diseases is an uncommon finding. When hypercalcemia and hyperthyroidism are concurrently present, measurement of parathyroid hormone seems indicated to determine whether the hypercalcemia is caused by hyperthyroidism or by coexistent hyperparathyroidism.

INTRODUCTION

Hypercalcemia is a common finding among patients with advanced hyperthyroidism. The incidence is variously reported to range from 10% to nearly 30% of hyperthyroid patients.¹⁻³ Disturbed calcium homeostasis is believed to be directly related to the effect of thyroid hormones on bone, resulting in accelerated bone-mineral turnover and decreased gastrointestinal absorption.⁴⁻⁶ Controlling the hyperthyroidism allows the disturbed calcium balance to return to normal.

While thyroid hormone-directed calcium abnormalities are relatively common, there exists another population of patients who actually appear to have two diseases — hyperthyroidism and hyperparathyroidism. Two such instances are reported here.

LABORATORY METHODS

Serum thyroxine was determined by competitive protein binding (normal range 5-13.5 mcg/dl), or by radioimmunoassay with a normal range of 5-13 mcg/dl. In vitro triiodothyronine resin uptake (T₃RU) was also performed and has a range of normal values from 25% to 35%. Thyroid stimulating hormone (TSH) and triiodothyronine (T₃) were determined in serum by radioimmunoassay and have normal ranges of 1-10 μ U/ml and 65-165 mg/dl respectively.

Thyroglobulin antibodies were determined by a commercial laboratory using tanned red cells and thyroid microsomal antibodies were determined by complement fixation. Long-acting thyroid stimulator (LATS) was detected by the same laboratory using a bioassay in mice.¹ Normally, no LATS activity is seen in serum. Serum and urinary calcium measurements were made using cresolphthalein complexone on a multichannel analyzer. Parathyroid hormone measurements were done by radioimmunoassay and were performed by the Mayo Medical Laboratory. Normal values are related to simultaneously determined serum

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1. Bio-Science Laboratories, 7600 Tyrone Ave., Van Nuys, Calif.

calcium concentration. Values greater than 40 $\mu\text{Eq/ml}$ when serum calcium concentration is greater than 10.5 mg/dl are elevated.

Radioiodine uptake and scintillation scanning of the thyroid gland were performed as a combined procedure using 100 μCi . sodium ^{131}I administered orally. Normal values range between 10% and 30% of the administered dose.

CASE REPORTS

PATIENT 1:

A 60-year-old woman had recurrence of a previously surgically treated goiter. A sister of the patient was known to have thyroid enlargement since an early age, but the patient became aware of her goitrous change at age 50. At age 55 she underwent subtotal removal of a nodular goiter. She did well following surgery until a few months prior to the evaluation when she noted heart palpitations and heat intolerance but disclaimed any change in her body weight. No personal or family history of bone disease, renal stones, polyuria or peptic ulcer disease could be elicited. Menopause had occurred at age forty. Supplemental estrogen was administered for years but discontinued one month earlier. Examination revealed a woman in late middle age who had moderate dorsal kyphosis. She was 61 inches tall and weighed 125 lbs. Lid lag, exophthalmos, chemosis and periorbital edema were absent. A well-healed thyroidectomy scar was observed and a palpable fullness detected just cephalad to the left sternoclavicular joint. The resting pulse rate was 100 per minute; blood pressure 130/80 mm Hg. Heberden's nodes and bilateral palmar erythema were noted. The remainder of the physical findings were normal for the patient's age.

Laboratory studies included T_4 (CPB) of 14.5 mcg/dl, T_3RU 33% and radioactive iodine uptake at 24 hours of 33%. A scintillation scan showed a large amount of residual radioactivity in the bed of the left thyroid lobe, with extension below the manubrium in the medial one-third of the left clavicle. A serum calcium concentration was 11.5 mg/dl and inorganic phosphorus 3.1 mg/dl. A concurrent fasting sample for parathyroid hormone concentration was 71 $\mu\text{Eq/ml}$. After preoperative treatment with propylthiouracil and Lugol's solution, neck exploration was carried out at the University of Oklahoma Hospital. A large mass of abnormal-appearing thyroid tissue which ex-

tended into the anterior mediastinum was removed *in toto*. A small amount of normal-appearing thyroid tissue was identified in the bed of the right lobe of the thyroid. A parathyroid adenoma weighing 500 mg was removed from the superior aspect of the right lobe of the thyroid. Neither inferior parathyroid gland was identified. A grossly normal parathyroid gland was found adjacent to the superior portion of the left thyroid mass and studies of biopsied material confirmed parathyroid tissue. The serum calcium dropped in 48 hours to a nadir of 8.1 mg/dl. No signs of latent tetany could be identified. Replacement thyroid therapy was begun with 50 mcg of l-thyroxine daily and increased in 45 days to 300 mcg as a single daily dose. The serum calcium level has remained normal.

PATIENT 2:

A 29-year-old insurance salesman was referred for the evaluation of Graves disease. As an adolescent he had been treated elsewhere for goitrous hypothyroidism and review of outside medical records confirmed abnormally low thyroid hormone concentration as measured by protein bound iodine. At age 20, he had muscle weakness caused by biopsy-documented dermatomyositis. The weakness was severe enough to require long-term glucocorticoid therapy, a treatment plan which was discontinued two years prior to his admission to Pres-

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Hyperthyroidism / MALES, KEM

byterian Hospital for evaluation. Replacement thyroxine therapy (150 mcg daily) had been stopped 60 days prior to admission because of symptoms of heat intolerance, nervousness and heart palpitations. There was no improvement in the symptoms after the hormone was discontinued. He complained of progressive exophthalmos, periorbital swelling, lachrymation and photophobia. Additionally, he had noted itching and a red swelling over the lateral aspects of his lower extremities.

Physical examination revealed an obese man with "cushionoid" facies and marked exophthalmos of 26 mm of the right eye and 24 mm of the left. Severe periorbital edema and chemosis were present and eye movements were restricted, especially superiorly. The thyroid gland was diffusely enlarged, twice the normal size. No bruits were heard over the thyroid gland. The resting pulse rate was 88 per minute. The precordium was active, but no murmurs or gallops were noted. Red, firm, raised areas approximately five cm in diameter were present on the lateral aspects of the lower extremities just above the ankle. Two linear healed scars on the left leg and a biopsy scar on the right shoulder were indurated with similar changes. No vitiligo was present, but one area of hyperpigmentation was noted on the glans penis. The tendon reflexes responded briskly. There was fine tremor of the outstretched hands. Modest weakness of the shoulder and hip girdle muscles was demonstrated.

Thyroid studies revealed a serum thyroxine (T_4 - RIA) of 7.9 mcg/dl, a T_3 RU of 28%, and a serum TSH of 3.4 μ IU/ml. However, the serum T_3 concentration was elevated at 200 ng/dl. The 24-hour RAIU was 29%. The scintillation scan was abnormal, showing significant thyromegaly and scattered areas of decreased isotope concentration. Antithyroglobulin titer was 1:400 and antimicrosomal titer was 1:25,600. LATS was detected in the patient's serum. 750 mg of calcium was excreted in the urine during a 24-hour period with the patient on a normal diet. Serum calcium levels ranged from 10.9 to 11.5 mg/dl. Serum inorganic phosphorus was variously found to range from 2.4 to 3.3 mg/dl. Serum parathyroid hormone ranged from 47 to 54 μ Eq/ml over a seven-month period of observation. The patient received 80 mg of prednisone daily for seven days, then 40 mg every other day for seven days on one occasion for the

relief of eye symptoms without effecting significant change in the serum calcium levels. Significant lowering of the T_3 concentration and resolution of the symptoms of excessive thyroid hormone were observed during propylthiouracil therapy. After Lugol's solution was added, a near-total thyroidectomy was performed and a left superior parathyroid adenoma was removed. A normal parathyroid gland was inadvertently removed from the left inferior position. The right inferior gland was identified and verified by biopsy, but the right superior parathyroid gland was never found. Prompt hypocalcemia followed the surgery with a nadir of 7.9 mg/dl. The hypocalcemia responded well to oral calcium feeding. Subsequently, calcium and phosphorus levels returned to normal when supplemental calcium was withheld.

Supplemental 1-thyroxine, 300 mcg per day, has been given since surgery and the patient appears clinically euthyroid. Histologic examination of the parathyroid adenoma revealed it to be composed almost exclusively of water-clear cells. A small compressed rim of essentially normal-appearing parathyroid tissue was adjacent to the adenoma. The thyroid gland seemed to display two pathological processes: Distinct changes of Hashimoto's disease were represented by extensive chronic inflammation in germinal centers along with focal scarring and extensive Hürthle cell changes. Additionally, impressive epithelial proliferation consistent with thyroid hyperplasia was found.

DISCUSSION

The thyroid disease associated with hyperparathyroidism was dissimilar in the two patients reported here although both had demonstrable thyroid abnormalities which existed for years prior to parathyroidectomy. Case 1 was mildly hyperthyroid prior to her initial surgery in 1971, and Case 2 had hypothyroidism with a goiter during his youth. Case 1 showed none of the clinical characteristics associated with Graves disease and serial examinations and thyroid scans were most consistent with nodular toxic goiter. Case 2, on the other hand, had pathognomonic changes of Graves disease. The immunological information supported an autoimmune thyroid disease and microscopic examination of the thyroid tissue showed characteristic changes of Hashimoto's disease as well as changes of epithelial hyperplasia.

Hypercalcemic hyperthyroidism is usually

associated with a state of functional hypoparathyroidism. Excessive thyroid hormone regularly causes increased bone turnover with resorption exceeding deposition.⁴ It may cause elevation of ionized and total serum calcium concentrations,⁷ intestinal malabsorption of calcium,⁵ increased urinary wastage of calcium⁸ and elevated levels of serum inorganic phosphate.⁹ These changes suggest that the hypercalcemia is of nonparathyroid origin and that the hypercalcemia leads to suppression of normal parathyroid hormone secretion, in turn allowing increased gut and kidney calcium losses. Measurements of parathyroid hormone in hypercalcemic thyrotoxicosis confirm this. Radioimmunoassayable parathyroid hormone levels are not elevated and, depending on the antiserum used in the assay, are found to be lower than the levels seen in normal, hypothyroid, and hyperparathyroid subjects.^{7, 9}

Hyperthyroidism can coexist with hyperparathyroidism in spite of the more commonly observed functional hypoparathyroidism of hypercalcemic thyrotoxicosis. Approximately 30 such cases have previously been reported.¹⁰⁻³² When the two diseases coexist, indirect indices of parathyroid hormone function suggest hyperparathyroidism such as decreased concentration of serum inorganic phosphorus, and an inappropriate elevation of radioassayable parathyroid hormone in the face of hypercalcemia is noted.¹⁰ This was a feature common to both patients reported here. (Table 1)

The etiology of the dual hyperfunction of endocrine glands so anatomically intimately associated is unclear. Hyperparathyroidism has been noted in all of the common causes of hyperthyroidism, be it Graves disease, multinodular toxic goiter, or toxic adenoma.^{24, 25, 17} This variability is evident in the two cases reported here; one had multinodular goiter and the other, severe Graves disease. The parathyroid pathology observed in coexistent

hyperthyroidism and hyperparathyroidism fails to show a consistent pattern. Interpretations of the pathologic specimens removed have ranged from a single adenoma^{17, 26, 30} to adenomatous or diffuse hyperplasia.^{25, 28} Were parathyroid hyperplasia consistently present, a hypothesis could be proposed to explain the parathyroid hyperfunction as a consequence of some signal from the thyroid gland or elsewhere, ie, secondary hyperparathyroidism. It is well known that it is difficult to distinctly identify parathyroid hyperplasia as opposed to adenoma formation. The number of observations of coexisting hyperparathyroidism and hyperthyroidism is so small to date that no conclusions can be drawn as to whether hyperparathyroidism develops secondary to hyperthyroidism or whether the two processes have appeared together by chance.

The assessment of nonthyroidal effects of hyperthyroidism should include measurements of serum calcium and inorganic phosphorus. Hypercalcemia and hyperphosphatemia suggest thyroid hormone-directed hypercalcemia, and treatment of the underlying thyroid disease should resolve the hypercalcemia. Hypercalcemia and hypophosphatemia, however, suggest parathyroid hormone-directed hypercalcemia and a direct measurement of the parathyroid hormone concentration in such cases would appear to be the most reliable method of differentiation. The documentation of coexisting hyperthyroidism and hyperparathyroidism should be useful in the determination of the most appropriate treatment for the patient.³¹ □

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TABLE 1

Laboratory studies in two cases of concurrent hyperthyroidism and hyperparathyroidism. Units for CA ++ and IP mg/dl; for PTH μ lEq/ml; for T₄ mcg/dl, for T₃ ng/dl, and for T₃RU %.

CASE	Ca ++	IP	PTH	T ₄	T ₃	T ₃ RU	Thyroid Pathology	Parathyroid Pathology
1	11.5	3.3	71	14.5		33	Multinodular	Adenoma
2	10.9	2.4	54	7.9	200	28	Graves'	Adenoma

Hyperthyroidism / MALES, KEM

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Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD

MARGARET BERRY BLAIR
with the collaboration of
R. PALMER HOWARD, MD

Prologue

Indian Territory, where Virgil Berry began his medical career in 1890, was quite different from the other territories organized by the United States. Part of what is now Oklahoma had been recently opened by the federal government to white settlement, but the eastern half, occupied by the Five Civilized Tribes (Cherokee, Creek, Choctaw, Chickasaw and Seminole) was still under tribal autonomy. Their National Councils included health regulations among their legislative actions. Not only the tribal laws but the way of life of many leaders among

the Indians and mixed bloods resembled those in the southeastern states from which they had been removed. Many also owned slaves. However, the more conservative Indians in isolated areas spoke their native languages, and retained ancient customs and traditions. After the Civil War, the Territory attracted increasing numbers of southern whites — both the reputable and disreputable. The laws against intruding and other offenses by non-Indians were seldom strictly enforced.

Federal reservations for other Indians occupied most of the western part of the Territory, but the ebbing tide of western migration led many "Oklahoma Boomers" to covet all these lands. In 1889 the U S government opened the central part of Oklahoma Territory to settlement. Migration into the more advanced town and country areas of Indian Territory increased also during the 1890's. The independence of the local tribal governments was gradually curtailed, tribal lands were allotted and the demands of the numerous newcomers impelled both territories towards statehood in 1907.

During the 1890-1910 era, important social, economic, and scientific changes occurred throughout the world and America. Advances in the medical sciences brought specific treatments for many infections and allowed the

Reprints of the entire manuscript will be available subsequent to the publication of the concluding installment. Separate-installment reprints are not available. Requests for reprints will be acknowledged only after the publication of the final installment. Address requests c/o R. Palmer Howard, MD, History of Medicine, OUHSC, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

commencement of modern surgery. Medical education and the organization of the profession were also modified toward the standards we know today. The Indian Territory Medical Association was successfully launched in 1889 and a similar association in Oklahoma Territory a few years later. The cultural and medical environment in the territories provided a setting to stimulate many physicians with talent and energy to careers of professional leadership. Books have been written about LeRoy Long in the Indian Territory and later in Oklahoma City, and about Lewis J. Moorman in north central Oklahoma Territory and later in Oklahoma City. Several other men, including Benjamin F. Fortner and Virgil Berry played important and conspicuous parts in Indian Territory and early Oklahoma medicine.

This biography of Virgil Berry vividly portrays his practice which began as a medical student on the territorial frontier, and advanced gradually through formal education, practical experience, and dedicated study. His career reached a climax, fortunately, in the happy years which gave birth to the State of Oklahoma. Virgil Berry was the last president of the Indian Territory Medical Association. As its elected spokesman, he led this body to amalgamate with brother physicians of the Oklahoma Territory at the Joint Session in Oklahoma City in May, 1906, when the Oklahoma State Medical Association was founded. Until his health failed he remained prominent in practice and organized medicine.

During the later years of his life, Dr Berry published several local newspaper articles on early day medical practice. He also presented a preliminary draft of his "experiences" to the University of Oklahoma Library at Norman and left a longer version with the youngest of his children. Born in Indian Territory, his daughter recalls experiences in his country practice from her childhood and young womanhood. In his later years Dr Berry, a widower and retired from practice, on many occasions recounted his experiences to her.

Margaret Berry Blair has been a newspaper reporter and has published in national magazines. She developed a pleasant style with a clear, often dramatic, and sometimes humorous presentation. Fortunate is the man who has a devoted daughter with the talent and the will to write his biography. *R. Palmer Howard, MD*

I. PRESSING INTO THE TERRITORY

Grandmother Berry said, "He came into the world kicking and howling in protest, and he has been at it ever since." We were talking about her first born, Virgil, my father. Of course, I knew that the protesting became vehemently vocal insistence that the ignorant be educated. I knew that he pushed and kicked his way from farm life in the 1870's and '80's — the mind-numbing labor of the eldest in a family of eight children — to become a doctor; and the last president of the Indian Territory Medical Association.¹

I know now that it could have been an unrealized dream if his grimly determined and frugal German ancestors had not melded with his "muddle-through" English forebears to somehow motivate the squirming infant born March 14th, 1866, near Salem, Indiana — just ten years before America's Centennial. He once said, "I guess I wanted to be a doctor each time mother bore another child. The doctor sometimes made it and sometimes he didn't, and I knew that I would somehow, someday be a country doctor in order to help such as her."

He might have added that he deeply resented his itinerant preacher father, Joseph, who rode off into the countryside with the compulsion to share his religion leaving Jane his wife, pregnant, and the farm work to Virgil — when Virgil was old enough to guide a plow, hold a hoe, and carry in wood. However, in all fairness, Virgil did admire his father's constant study and his knowledge of the classics. Joseph named one son Virgil and the other Homer. Perhaps he felt that he had at least saluted the intellectual world there in the wilderness. Virgil grudgingly admired that.

That Indian Territory would be in his future became Virgil's dream on that spring day when he drove the wagon in to Salem for supplies and heard the men talking on the porch of the general store. With nineteen-year-old credulity, he listened spellbound to the talk of land-hungry farmers. "I'm bound for the hallelujah Oklahoma land," shouted one. Another, giving his thigh a hearty slap, declared, "I'm agonna join Payne's colony in Kansas and boom into the Territory. Payne'll get there sure as shootin' . . . the gov'mint cain't hold 'em back!" Another, pulling a soiled paper from his pocket waved it aloft, shouting in high glee, "Listen, fellers, to what a drummer give to me at the boardin' house." And, in a high nasal tenor sang:

I want to be a Boomer,
And with the Boomers stand,
The Oklahoma country,
To me the promised land.

I want a quarter section
A tidy little farm,
All proved up by pre-emption,
With title safe from harm . . .

That did it for Virgil. Staples stashed away in the back of the wagon, he knew as he drove along the deeply-rutted dirt road back to the farm, that he would hurdle the obstacles of poverty, limited education, and the demands on him by his mother and his brothers and sisters, to find a way to get a medical education. Certainly, the Indian country was the place to go, for he had heard that there were no laws governing the practice of medicine, and his education consisted of a year at Moore's Academy in Kentucky and school in Salem, Washington County, Indiana — his official education, that is. He had read everything that crossed his path and that was considerable, for his father picked up books wherever he roamed, collecting them as some people collect jewels. He brought them to his brood as learning bait.

Back home from town that memorable spring day, Virgil slipped the big, well-worn geography from its shelf and headed for the barn. There, away from the intrusion of the children, he opened the book to the center map of the United States. Placing his finger on Indiana he carefully traced southwest toward Indian Territory, then slowly reversed the path, stopping at the first town in letters larger than those surrounding it. He looked to see what it was — it was Springfield, Missouri. And he knew that he would go there to find work, any work, in order to go to medical school. He closed the book and walked back to the house. He placed the book with his newly-found location for a fresh life back on its shelf. Slowly, thoughtfully, he went back to the barn to start the evening chores, his secret plans only just beginning to bubble from the yeast of hope.

Through the summer of '86, Virgil worked no less vigorously than he demanded of his brothers and sisters. He prodded them, taught them the planting, the care and harvesting of crops, and the care and breeding of livestock. He wondered later how he had known how to care for and heal animal ailments and concluded that it must have been a natural talent. He was

VIRGIL BERRY, MD

Chronology

1. Pressing Into The Territory

March 14, 1866—Born, near Salem, Indiana.

Autumn, 1886—Left home for the West; worked in Springfield, Mo., where he also "read" medicine under a retired doctor.

Autumn, 1888—Enrolled at Physio-Medical Institute, Chicago.

March, 1899—After completing the freshman year, he travelled by train to Wagoner, Creek Nation, I. T., to practice medicine. Met Emma Kate James.

Spring, 1889—In a few weeks he moved to Chouteau, Cherokee Nation.

October, 1890—Returned to Physio-Medical Institute, Chicago; took the courses of the two remaining years simultaneously.

March 14, 1891—Graduated with MD degree from Physio-Medical Institute.

always grateful that he had learned a great deal about human troubles through having been veterinarian for his own stock.

That fall, with crops laid by, the house and barn snug for the coming winter, the children started in their "schoolin'," Virgil went with heavy heart to his mother. He dreaded to tell her of his plans. Haltingly at first, and then with great conviction, his dreams spilled forth as his stunned mother sat without moving and without expression. She thought at first that her eldest child, her dependable son, her father-substitute so much of the time, had been struck by the hot harvest sun.

She arose finally, and took down the brown crock where the cash was kept and counted out its contents. After putting aside what would be needed for clothing, staples, and emergencies, there was exactly 25 cents left. Silently, she held it toward Virgil in the palm of her hand. Her gesture said louder than words — *How can you possibly study medicine with no money?* His convictions wavered. His mother had made him see the ridiculousness of the situation. Then, too, the hurt, frightened expression in her eyes made him feel disloyal. But, instinctively he knew it was now or never. He had known from the beginning that he would have to surmount obstacles greater than a lack of money.

"I have to try, mother," he said. "You and the children are set for the winter. Maybe father will farm in the spring when he knows I will not be here." Something in the tone of Virgil's voice told Jane that she would not be able to stop this tall, loose-framed, muscle-hardened son. And deep down she was proud beyond self-pity in the knowledge that she could not. With no more protest and with dry eyes, she handed him the quarter, then reached down in the jar and counted out two dollars in coins and added them to the first silver.

Jane found the cowhide "telescope" given her by her parents to carry on her honeymoon. It would hold Virgil's meager belongings. When she finished packing, Virgil took the valise, his eyes not quite able to meet those of his mother. He kissed her quickly, then trudged down the road toward the southwest. He always remembered that the day was crisply cool with a hint of frost. For as long as they were in sight he stopped occasionally to wave to his awestruck brothers and sisters and the lonely figure of his mother. His great adventure had begun.

Many days later Springfield loomed large in the distance. At last! Walking down Springfield's Booneville Street, a very hungry Virgil kept a sharp eye out for possible work. After a few blocks he spied a sign wanting help at a produce store. He accepted without hesitation and spent his first weeks going into the country buying poultry, eggs, game, and skunk hides for W. R. Fisher's "commission house," at \$2.00 a week, and board. It was grueling work, aside from the smells. He went into the country and bought wholesale, and he kept the job only long enough to learn that a respected and retired doctor owned a grocery store. DOCTOR was the magic word — and Virgil wasted no time making contact and being accepted to work in the store, deliver groceries and grade down the yard for 50 cents a day.

Soon, good Doctor Stewart promoted him. For the princely sum of \$30.00 a month Virgil was to sell groceries, drive a team of old gray mares delivering groceries, and feed and care for them. But, the glorious bonus was to "read" under the doctor. Another bonus was free living quarters in the upper story of what had been servants' quarters back of Doctor Stewart's house. The lower story was a stable for the team. Here, in his spacious lodgings, he cooked his food on a two-burner oil stove. This was living! He even

had enough left over after his modest needs were met to send a portion of his wages home to his mother — salve to his conscience for depriving her of his labors.

And he was learning! He read far into the night from books borrowed from the doctor. Of course, since he was always up at five in the morning to sweep out the store, care for the horses and begin another day's work, the days often ran together and his studies were neglected. He considered the day lost when he had not opened a medical book and he became discouraged. One day Doctor Stewart brought a worn copy of *Gray's Anatomy* to the store and handed it to Virgil. "Here, young man, is the basic source for all good doctors. Read it well, and someday buy one of your own, for I must keep this one." Virgil read it eagerly, gratefully, and his young, absorbent mind photographed it indelibly, so that years later he could quote exactly page after page.

Margaret Berry Blair was the youngest child born to Doctor and Mrs. Virgil Berry in Wetumka, Indian Territory. She was a newspaper reporter for the Chicago Herald & Examiner and the Atlanta Journal and has published in Good Housekeeping. Since residing in Oklahoma City she has been an active member and President of the Auxiliary of the Presbyterian Hospital. For several years she has been editor of the Auxiliary's quarterly newspaper, The Pink Periscope. She is also a member of the Archives Committee of the Oklahoma Heritage Association.

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Talk ran rampant around Springfield about Indian and Oklahoma Territories. Every gathering discussed Payne's Colony across the border in Kansas. Even though their leader had recently died, the "boomers" were prepared to enter once again into the forbidden country.

Virgil had been in Springfield two years now and had not yet been able to save enough to attend medical school. His spare frame became even thinner as he tried to economize on food. Finally, in desperation he poured his heart out to "Aunt" Tillie Weaver, boardinghouse keeper, who had watched her grocery delivery boy waste away before her kind eyes. Aunt Tillie was a widow and childless. When she could stand it no longer she insisted that Virgil come to her boardinghouse to live, where she could feed and watch over him. In the end, it was Aunt Tillie who loaned Virgil the money to attend his first year of medical school in Chicago at a college now extinct, the Physio-Medical Institute. Virgil said later that curious things sometimes happen to people that seem to go beyond coincidence, for even though Aunt Tillie's support was a very weak reed on which to lean, it was one, and it came just in time.

Interestingly, Virgil had made some substantial friends in Springfield, some of whom had offered to lend him funds just before he left, but there was a mutual need where Aunt Tillie was concerned. He needed her and she needed him as a substitute for the son she never had. She tried to refuse the money much later when Virgil repaid his debt to her — but he insisted that she take it and use it for a trip to Niagara Falls, where she had always longed to go.

There lived in Springfield, unknown to Virgil, a very prominent family — one "Pony" Boyd, whose son, Robert M., was to have the greatest influence on his life of anyone during his younger years. Robert's grandfather was founder and president of the First National Bank of Springfield. His father, "Pony," was not only one of the most respected lawyers in the state, but had served a term in Congress and had been United States Minister to Siam. Robert, much to the chagrin of his family, shook the political dust from his feet and determined to become a doctor. He, too, chose the Physio-Medical Institute in Chicago.

Since he and Virgil were the only students from Springfield, they drifted together, roomed in the same place, and later shared the same room. They formed a fast friendship even though Robert had ample funds to carry him

along, in contrast to Virgil's straightened circumstances. Robert had had every advantage. He had lived in luxury in contrast to Virgil's austere farm life, but that seemed to make no difference. The young men were drawn together, and they took Chicago by storm! After Virgil's death the following notes were found written in Virgil's handwriting about some of his Chicago experiences:

Robert and I had a fair room with double bed and bath, including light and heat for \$3.50 per week. We ate at a restaurant near the college for 25 cents a meal for breakfast and the noon meal. Supper was a large bowl of milk toast for 15 cents, which lasted us until the generous breakfast of hot cereal (usually oatmeal), dried fruit, ham, eggs, biscuits, and coffee.

I shall never forget our Christmas dinner. We were served delicious baked wild duck with oyster dressing, vegetables, pumpkin pie, cake and coffee — for 35 cents.

Chicago's markets were all the promises of Alladin's lamp to my hungry eyes. South Water Street Market extended several blocks and I heard that this market had more game for sale than any other place in America at that time. When cold weather came, the produce and meat stores placed their displays on the sidewalk and on racks in front of their stores — and I have walked along these blocks in November and seen literally thousands of quail, prairie chicken, wild pigeons, wild ducks and geese, squirrels and rabbits — and many many wild turkeys. Hanging on racks were dozens of deer and some bear. The variety was staggering.

The fish market was the same. A. Booth and Co. dominated the fish market. They were said to be the largest retail dealers in sea food in the world at that time. Of course, Chicagoans were no more modest than Texans. But, one could buy a quart of fresh oysters for 35 to 50 cents, according to size.

The most exciting and profitable incident of my college days centered around the famous and charming Adelina Pattie, and the grand opening of the Chicago Opera House, which had just been completed. Tickets were to sell for \$1.00 in the gallery for seats costing 25 cents ordinarily. A box for the full season of ten days was \$15.00. Unbelievable!

I was delegated to buy the tickets for three other medical students. After standing in line for hours, I finally arrived at the ticket window at noon and requested four gallery seats, handing the attendant a twenty dollar bill I had been hoarding for months. The boys were to pay me when their allowances arrived the first of the month. The precious tickets were handed me by the agent along with my change in silver dollars — sixteen, I thought.

I stepped out of line — and almost fainted, for I had been given a twenty dollar gold piece for a silver dollar. I held it up as near the window as I could get and said, "You made a mistake in my

change." But he replied in a very loud voice, "We never make mistakes . . . move on!" That windfall made the purchase of *Gray's Anatomy* possible. It was proudly carried into Indian Territory and very likely saved a number of lives.

Robert and Virgil finished freshman year together in early spring of 1890. Robert loaned Virgil train fare plus \$15.00 and started him on his way via Ft. Smith, Arkansas, to Wagoner, Indian Territory. Robert was not a little envious of Virgil's daring and wanted very much to go with him, but he finally gave in to his family's insistence that he return to Springfield and not go "gallivanting" out to uncivilized country "where he might be scalped."

It is doubtful if any two young men were less scientifically equipped to practice their profession, and yet, clinical medical practice had advanced along some lines. Bacteriology, pathology, and simple clinical diagnosis were beginning to make a difference for the better. Surgery was on a higher plane scientifically, due to the great discoveries about wound infection by Pasteur and Lister. The giving of drugs was almost entirely on a trial basis. Hundreds of drugs then in common use were given by pure guesswork — most of them discarded today.

And so, Robert and Virgil went their separate ways, but they did carry on a correspondence that would be fascinating reading if it were available. They shared, by mail, experiences and difficult cases and each was benefited. They agreed that additional medical training should come as soon as possible. It must be remembered that at that time thousands of young doctors were starting to practice after only "reading a year" under a family doctor. Virgil never considered for a moment that his education was finished, and it never was, for he returned for study and postgraduate work time and again.

It was March 1st, 1889, that Virgil stepped off the train to the "whoop and hollering" frontier town of Fort Smith, in order to catch the "Katy" down into the Territory to Wagoner. Fort Smith was then the last stand of civilization on the eastern border of Indian Territory. Well, it was a civilization of sorts — for since it was a penitentiary offense to sell whiskey in the Territory, Ft. Smith was the mecca of liquor dispensing. Main Street was lined with groggeries and the river front was a row of dives and "barrel houses." It was also the location of the famous "Hanging" Judge Isaac Parker's court,

where Virgil was often to be called to testify on questions of bodily injury or murder committed during the innumerable fights.

That trip from Ft. Smith to Wagoner, I.T., was a baptism of fire. The train was filled with howling men, both white and Indian, fresh from "one for the road." Virgil's newly practiced professional dignity collapsed immediately and, hunting a coach farthest away from the worst of the lot, he crouched down as low as possible to avoid any stray bullets. However, no shooting took place that trip and he arrived unscathed except for his injured dignity.

That was the day that "lightning struck twice." Not only did he realize his dream of "going to the Territory," but March 1st, 1890, was the day he saw for the first time "Miss Emma." Emma Kate James was a soft-spoken, blue-eyed, rich brown-haired, full-bosomed girl from Tennessee. He was always frank to say that from the very first glimpse she affected him strangely.

This is the way it happened. He disembarked that cool March day and looked around him at the "cow town" of Wagoner, Indian Territory. He saw a small country store, two section houses, a small boardinghouse, and two shabby depots — the Missouri, Kansas, and Texas (the Katy), and the Missouri Pacific. The boardinghouse doubled as a hotel for cattle shippers and "punchers." *I wanted wild country and I've found it*, he thought. He knew at once that as a location for a doctor it held a forlorn hope — but for good or bad, there he was. He walked over to the boardinghouse and paid a quarter for a stomach-filling meal, then strolled over to the Missouri Pacific depot to think; wondering if it would not be a good idea to get aboard the next train and keep going south for as long as his money held out. With a glazed look in his eyes and indecision in every step he watched as the 2 PM train came in.

Suddenly, the glaze left his eyes and he watched unbelievably as a neatly dressed man and six children left the train, "civilization" written boldly in their appearance. An elderly man left a spring hack and farm wagon and went eagerly forward to embrace the children and father alike. Fascinated, Virgil watched the eldest child, a lovely girl of about 18, as she herded toward the wagon the well-mannered children, her brothers and sisters, he assumed. As she turned to look at her surroundings she saw Virgil and their eyes held for a second; then she gathered the brood about her as the horses

were started up and headed for the country toward the east. All thoughts of leaving for parts south vanished, as Virgil turned back toward the boardinghouse. Certainly, with less than five dollars in his pocket and no prospects whatsoever except his own ambition and ingenuity and the most rudimentary knowledge of medicine, romance was quite out of the question. His grandfather Sides had told Virgil that he considered it a sin to marry without first preparing a home for one's bride and Virgil admired and respected his grandfather enormously.

The minute he had left the train on arrival in Wagoner, he had artfully dropped the information that he was a doctor looking for a place to locate. With the invisible magic of the communication network of the frontier, the information spread like wildfire in August. So, it was not too surprising that along toward eight that evening a messenger came galloping up asking if the new doctor would ride out twelve miles to the "old Spears' place" next day to see a sick woman, an invalid by the name of McMahon. The messenger thoughtfully brought along a "cow pony" for the trip.

At daybreak the next morning Virgil, following instructions, headed the pony east toward his very first patient. Never again would he experience such heady exuberance as he absorbed the crisp March air, the fragrance of buds of dogwood and redbud just bursting into bloom, the vision of delicate green leaves of maple, walnut, and oak, and the white accent of wild plum all around in their early splendor. From the ground, wood violets beckoned. On that morning there was all the seduction of spring in Indian Territory. Virgil succumbed completely. All this and his first patient, too! He knew that this country was where he wanted to be.

Of course, in all his exultation, he failed to wonder where his patients would come from. For several miles he did not see a single house. What few homesteads he saw consisted of a log cabin, perhaps a shed, a makeshift chicken coop, and a few cleared patches for corn. About two o'clock Virgil crossed one of the most beautiful streams in eastern Oklahoma, Fourteen Mile Creek. He knew even then that the valley before him was a hunter's and fisherman's paradise. He was to learn that in winter thousands of wild ducks spent weeks feeding during their migration south.

There it was. Just beyond the beautiful creek,

the Spears' homestead loomed through the feathery foliage of clumps of scrub oaks. The Spears family had migrated from somewhere in the south, during the Civil War, hoping to escape the fighting, it was said. They sold the place and disappeared soon after the war was over.

Virgil stopped to take it in. It was a large two-story house, part timber and part log built in two wings in the traditional manner of southern homes of that day. The kitchen wing and the living wing were divided by a breezeway, where hickory-bottomed chairs held the inhabitants trying to catch a breeze during the usually hot summers. Taking a deep breath and assuming what he hoped was his very best professional manner, Virgil walked up to the house, tied the tired pony under a tree and knocked on the heavy oak door.

Almost instantly, the door opened. Standing there before him was the lovely girl he had seen get off the train the day before. His shocked dismay almost destroyed his professional facade, but he recovered in time to tip his hat politely and introduce himself — and let it be said for her Victorian upbringing, Emma Kate blushed as she opened the door and invited him in.

Through the confusion of introductions, relationships and circumstances soon unfolded. The men were brothers-in-law. Both families had been impoverished by *THE WAR* (there was only one war in their lives at that time) and had left middle Tennessee for a new start. Pleasant McMahon, owner of the home, had come with his frail wife, Mollie, who was ill-equipped for frontier living, and who had almost immediately contracted a strange malady. "Pleas," as her husband was called, raised cattle and farmed, and was doing quite well.

William Robert James, the father of Emma Kate, was another matter. Captain Billy James (he was never called anything else) went to war with a body servant, but even that kind of privilege could not save him from the grim experience of sleeping on soggy earth and the realities of death and destruction in that horrible war. He carried the scars of it for the rest of his life. Returning home after the War, Captain Billy married his childhood sweetheart, Amanda Fergeson, for whom he rode the sixty miles from Cornersville to Nashville for a Reed and Burton silver casket with etched glass fittings as his wedding gift to his bride. They needed pots and pans, dishes, and furniture, of

course, but as a wedding gift? Never! Amanda bore him four children, three girls and a boy; then gave up her slender hold on life and died. Emma Kate was the first born, and without ever having experienced carefree childhood, she took over the children and home. Captain Billy next married one of the McMahan girls, who bore one son and succumbed to "consumption." But she had a younger sister, Nan, who bravely became a third wife and mother to the brood. Nan bore Captain Billy's sixth and last child, a son, and for awhile it was thought that she would flourish, for she was young and healthy. However, it was not to be, for she soon complained of stomach pains and died. Emma Kate took the last baby in her arms and counted her five brothers and sisters as blessings instead of charges. There was Annie Laura, Louie, Robert, Pleasant (after his uncle, of course), and baby Will Roy.

Introductions over, Uncle Pleas led Virgil into the large downstairs bedroom with its oversized walnut furnishings and introduced him to Aunt Mollie, lying wanly on the featherbed brought from Tennessee. That day a stethoscope, a few drugs including cathartics, quinine and simple herbs, were Virgil's considerable equipment carried in a bundle over the pony's neck — forerunner to the saddlebags that were to come later. But the most important tool of all was Virgil's seemingly instinctive ability to diagnose an illness, an ability that had really led him to the pursuit of medicine in the first place. Mollie was suffering the devastation to her frail body left by malarial fever. That was Virgil's diagnosis. He sat and visited with her, took her pulse, used the stethoscope, and left quinine powders with instructions for their administration — and everybody felt better immediately, even Aunt Mollie.

After a supper of fried quail and apple dumplings made from cellar apples laid down the previous fall, prepared and served graciously by Emma Kate and a part-Indian "hired girl," Virgil sagely remarked that he would return to check on his patient soon. As he began his farewells before the long ride back into Wagoner, he glanced down at what Uncle Pleas had put in his hand . . . and saw that it was the magnificent sum of \$15.00. Never was he to receive a fee afterward that was worth half as much!

Miss Emma looked lovelier each time Virgil called across Fourteen Mile Creek. The first

symptoms of love stirred in his heart and he was pretty sure the attraction was mutual. But what cruel irony for it to happen just now. The promise was there, but hopeless of fulfillment. He was broke, in a strange country with nothing on which to build a livelihood but his own potential. Even if things had been more propitious, what chance had Miss Emma to consider marriage with her father's family literally laid at her feet? There were no "mammys" in Indian Territory. Besides all that, Aunt Mollie got well and there were no more excuses for professional calls. As forlorn as things looked, Virgil knew that he would be drawn back and back in courtship. He also knew that he now had an added incentive nudging him on toward success.

Back in Wagoner he scouted the countryside in earnest and came to the conclusion that this was not the place to enter practice. It is hard to conceive of the primitive conditions in that part of the country in 1889-1890. Roads were often dim trails over the prairie and through the woods. There was not a single commercial telephone line in the entire area, although the first line had been built in 1886, from Tahlequah to Ft. Gibson to Muskogee. Tahlequah was the capital of the Cherokee Nation, Ft. Gibson was an army outpost, and Muskogee was headquarters for the Indian Agency of the Five Civilized Tribes. The line had been financed by the Cherokees for their own use. In 1894, a 27-mile commercial line was constructed from Tahlequah to Muskogee, but in 1889 most news was carried locally by messenger on horseback.

A rumor spread to Wagoner that a little town, named Chouteau, one of the oldest settlements in the Territory, eighteen miles north on the Katy Railroad was in need of another doctor. Gossip had it that the one doctor there was incapacitated most of the time. Virgil boarded the morning Katy and headed for Chouteau. He found it was a small cattle-shipping point for ranches farther west. It boasted two general stores and a small drug store. One of the stores was owned by Clem Rogers, father of Will Rogers. It was a small building made of rough boards about fifty feet long. Will Calvert, cousin of Will Rogers, was manager, salesman, and night watchman, too, for he slept in the store. On one side of the building was a lean-to where baled hay and equipment were stored.

Will Calvert offered the lean-to to Virgil as an office for rent of \$2.50 a month if he would locate there. But something in Will's tone of voice when he mentioned the doctor already there

aroused Virgil's curiosity and he decided to visit his possible competitor before deciding to accept the offer. What he found was one of the shadowy figures often swallowed by the West — this one on his way to oblivion.

The doctor (no need for names) was a brilliant man, a graduate of prestigious Tulane Medical School in New Orleans, but he was an alcoholic and a morphine addict. He urged Virgil to locate there and become his partner, probably realizing in his more lucid moments that he was of very little use to the community and certainly unable to make country calls any longer. In all honesty it was a temptation to Virgil to accept the offer. The doctor would have been a good prop on which to lean at that stage of his experience. But Virgil turned the offer down and decided to accept Will Calvert's offer of the lean-to. He carefully cleaned it of its rubbish, and if it had been furnished with plush and mahogany, he would not have hung out his shingle with more pride.

He was too poor to buy a horse, without which he would be helpless, since nine-tenths of his practice would be miles in the country. At first, he borrowed from a kindly-disposed cow-man. However, one day he was called to see a black farmer with pneumonia. Jessie was his name and he lived seven miles from town. Virgil made numerous visits to treat and nurse him back to health. When Jessie recovered the bill was \$30.00, but he had no money. He did have a pony hardly old enough to ride. He offered Virgil the pony for \$15.00 and corn from his crib for the balance. As Virgil led the little fellow away, Jessie called out, "He's got a good noodle on him," — and he was "Noodles" from that day on.

The Indian pony was sure-footed, strong, and able to forage for himself. Noodles seemed to realize that he had a duty to humanity to perform along with Virgil and always seemed eager to go no matter how recently he had come in from a trek. With good care, he grew rapidly and at the proper time was broken to harness and Virgil acquired a two-wheeled cart with a body somewhat like a buggy, but which could travel over roads and trails nearly impassable for a four-wheeled vehicle. Virgil told his children much later that Noodles soon learned the route to the old Spears' place almost without direction — for he continued to make the trip as often as possible.

Goodness knows, courting during his Chouteau days had its hardships. Often the trips across the Grand River were truly peril-

ous. Sometimes the river was at flood stage — too deep to ford. Sometimes the small flatboat run by John Charbenear washed away and it was swim or return home. Needless to say, that was out of the question. So, stripping to the skin, he tied his clothing in a compact bundle and lashed it firmly to the top of Noodle's head, led him to the edge of the river and pointed his nose to the east. With the bridle hung on the saddle horn, Virgil stepped gingerly into the swirling stream, grasped the pony's tail and gave him a pat, with, "Go, old boy," and in five minutes they were on the other bank of the river and on the way to see the Tennessee girl, damp but happy.

Virgil stayed only one short year at Chouteau, but many memorable experiences and much learning were packed into that year. One vivid memory stayed with him always — an evening in November, a very cold snowy evening with a raw wind moaning out of the northwest. He was standing at his office window watching the swirling snow, when suddenly he saw a strange drama enacted before his eyes. Two Indian men and their wives, each on a pony, came riding up the road. They suddenly stopped by an old cemetery, and after a short parley the men rode on. The women got down, unsaddled their ponies, made a bed by spreading their saddle blankets on the ground along the south side of the fence, and lay down. Deeply puzzled by what he saw, Virgil finally reached for his coat to investigate, when the women got up, wrapped a blanket around a small bundle and got back on their horses. They rode on up to the Rogers' store where their husbands were waiting and presented a brand new baby to the grinning father.

Fascinated, the fledgling doctor watched eagerly, expecting that surely his services would be called upon; but he was ignored completely in a most unflattering manner even though he knew Will Calvert had told them medical aid was available. The little group slept the night on a bundle of straw provided by Will and next morning they loaded provisions from the store on their horses and rode away. It was the most natural childbirth Virgil was to see in all his practice.

Patients began coming, in rather alarming numbers. He now realized that aside from infrequent consultations with the older doctor, his chief stock in trade must be his own resourcefulness, and the good *Gray's Anatomy*. He acquired his first saddlebags in which he carried

sterilized gauze dressings (the gauze ordered from Kansas City by the bolt), simple drugs, iodoform, two clean sheets, chloroform, a scalpel, and catgut sutures. A scalpel! He had soon learned that surgery was his first love. He had a natural bent for it.

He saw malarial fever, pneumonia, the infectious diseases of childhood such as measles, chicken pox, and diphtheria — these composed about nine-tenths of his practice. Typhoid was rare, all cases ascribed to infection from one of the adjacent states. His first case of typhoid had some interesting ramifications.

Two brothers named Wilder came down to the Territory from Arkansas, just over the border, during the late summer with a small horse-powered threshing machine to care for the small farmers' limited crops of grain. They had hardly started their operations when the younger brother was stricken with typhoid. Never having seen a case before, Virgil used the only treatment known to him — nursing. He rode back and forth the eight miles and sat by the desperately sick man, changing cold packs, feeding him chicken broth when the patient could hold it, and generally using all the little nursing tricks he knew. Miraculously, Wilder pulled through and Virgil felt justified in charging a fee of \$65.00 — the largest he had ever charged to date, and the nest egg he hoped to apply on his return to medical school in the fall. Both brothers promised that as soon as they collected their threshing money his bill would be the first to be paid. Early fall came, but no payment. A farmer rode in to Chouteau one day and told Virgil that the brothers had returned to Arkansas. Desperate need spawns desperate actions, and it was unthinkable to Virgil that he give up returning to school.

It was sixty miles to the Arkansas line, but Virgil packed four lunches in his saddlebags along with a bag of shelled corn for Noodles, and long before daylight started at an easy pace in pursuit of that very important fee. On the far side of Grand River the trail became dim, but Noodles plodded along until noon, when Virgil realized that he was at Rowe's Prairie, home of a part-Cherokee man known for his hospitality, called "Judge" because of the sage advice given the country people thereabouts. Judge Rowe invited Virgil to his groaning board — literally long pine boards placed side by side on saw horses. He

apologized profusely for asking Virgil to pay 25 cents for his meal, explaining that it was forced upon him because of those who would "eat him out of house and home" if he did not. He then gave Virgil specific instructions as to the route he was to take and bade him farewell and Godspeed, warning him to avoid, if possible, a notorious family of outlaws named Wickliffe, who lived not far off the road. Some pretty serious crimes were laid at their door, he said, including murder and robbery. Virgil thanked him and rode on down the lonely trail. At sunset, tired and hungry, Virgil stopped at a stream off the trail. He fed and watered Noodles and tied him to a blackjack limb and made camp. He ate one of his lunches. Then, laying his blankets on the ground with a slicker on top, and using Noodles' saddle as a pillow, he slept the sleep of the just.

Just before daybreak, he was startled to hear roosters crowing nearby, and soon saw through the undergrowth that a man, whom he recognized from Rowe's description as one of the Wickliffe clan, was leading two horses down to the creek for watering. In a matter of seconds, the man broke through into the clearing and stopped abruptly as he saw Noodles, and then Virgil. The two eyed each other a moment without speaking, then Wickliffe broke the silence. "You been here all night?" Virgil nodded and quickly spoke, as the man started toward him menacingly. "Yes. I'm a doctor on my way to see a patient across the border." Wickliffe grunted, then commanded, "Git out, and don't come back." This Virgil did with alacrity, and by good sunrise he had reached the Arkansas border. He knew he was at the border because that was where the dim trail ended and a plain dirt road began.

He had not traveled far, perhaps a quarter of a mile, when walking toward him leading a horse was his former typhoid patient "big as life and twice as natural," as the saying went in those parts. Virgil always chuckled as he told the story later, for Wilder's face was a study in astonishment.

"Wh-what you doin' up here, Doc?" he asked. Virgil simply held out his hand and said, "Money." Wilder turned and walked up the trail to his double log house, hung the bridle of his horse over a split rail fence and sat down on the porch. Virgil could see that he was almost visibly putting his thinking processes through their paces. Finally, Wilder faced the inevitable. Going into the house he came out with a

roll of bills in his hand, peeled off \$65.00 and handed them to the waiting Virgil.

Five minutes later, pony and newly rich rider were back on the trail headed for the Territory. There must have been some degree of admiration, shame, or some strange emotion in the heart of the man, because he called out to the disappearing figure of the doctor, "You're all right, Doc. Sorry I put you to so much trouble. Hope they's no hard feelings." Virgil dryly remarked after telling this story one time, that it was slightly more trouble than placing a stamp on a bill and dropping it in a mailbox.

As October and the beginning of medical school drew nearer every cent was important. Virgil counted and collected with great zeal. He felt that it would be a calamity not to return to school, especially for courses in anatomy and surgery.

One prosperous farmer owed him \$20.00 for the difficult delivery of his last child, and many post-natal visits. The man kept putting Virgil off saying he would pay when his wheat was harvested. He had a reputation as a fighter when drunk, but was very pleasant when sober. Virgil pressed him when sober and avoided him when drunk. Word finally came that the crop was harvested and that he was heard to boast that he "warn't gonna pay Doc, nohow." That remark angered Virgil. On a September day, he hired a former patient with a wagon who could not pay his bill any other way, to drive him to the farm of the recalcitrant debtor. It was going to be a load of wheat, or it was going to be cash. They found the farmer sitting on his porch smoking a corn cob pipe. "What you want, Doc?" he barked. "I want either my fee or payment in wheat. When you needed help I cared for your wife and baby. Now I need help and you will have to fulfill your agreement." Taking his pipe from his mouth, he rose from his seat and stated flatly, "Cain't let you have wheat. Just got enough for bread and seed." "Cash, then" Virgil said firmly. "Ain't got no cash" came the reply. Without answering, Virgil turned the wagon and drove to the barn where he and his helper loaded the wheat, all the while watching the figure on the porch, but he strangely enough, did not move. Virgil always credited his luck to the fact that the man was sober.

One of his last cases in Chouteau was not profitable in cash but valuable in experience. This occurred outside town at a railroad camp. Two rough Irish section-laborers, "tie hack-

ers," got into a heated discussion over the charms of their respective sweethearts. Finally, in anger, one hit the other squarely on top of the head with his spade and the blow came down with such force that it split the scalp three ways, baring the skull. Frightened out of his wits the assailant dropped the spade, found a horse and rode at a gallop into town for Virgil, only to find him out on a case.

Some time later Virgil returned to his office and rode post-haste with the hysterical messenger to the camp fully expecting the man to be dead. But the hardy workman was still living with dirt, hair, and even pieces of his old felt hat driven into the mess. Virgil cleaned and patched the ugly wound, there by the railroad tracks as best he could, without even sufficient clean water to wash up.

He ordered the patient placed on a handcar to take him to his bunk. As the car rolled away, the humbled, repentant, near-murderer called out to the departing victim, "Sure, and while you're laid up I'll take as good care of your gir-r-l as if she was mine!" The handcar patient managed to rise from his couch of pain enough to shake a feeble fist in the direction of his erstwhile friend with his doubtful generosity. The crew moved on and although he heard that the Irishman was soon able to do his own court-ing again, Virgil never was paid for his patch-work.

At last all of the collectible accounts added up to enough for medical lectures. In high spirits, Virgil wrote Robert Boyd. Robert wrote back that he had refused another roommate hoping Virgil could make it.

Before finding a good home for the faithful Noodles, Virgil rode one last time with eager heart across Fourteen Mile Creek to the old Spears' place and Miss Emma. When he left there was an understanding, which in those days meant that she would wait for his return. There was still no ready answer to their future marriage or how it could be made possible, but since when has that been a deterrent to young dreams?

Virgil held a grand reunion with Robert back in Chicago at Physio-Medical, each eager to share the experiences of their year apart, and each anxious to share study again. Perhaps never before had there been such an appetite for learning at PMI. Whetted by his year of practical experience, Virgil drank in lectures hungrily. Now, of course, Robert was in his third and senior year while Virgil was

Scalpel / BLAIR, HOWARD

only in his second year. The two balanced out nicely, for Robert was of inestimable help to Virgil, and even Virgil was astounded at how much experience had taught him that he could benefit by and pass on to his friend.

Of course, he told Robert all about Emma Kate and their impossible hope for marriage when he returned to the Territory. He also told Robert that he had a secret hope of taking the two years in one and graduating with his class in the spring — and it happened. He was allowed to take senior exams that spring, and to the astonishment of a skeptical faculty passed with grades almost as high as the best three year students.

Virgil kept the evidence the rest of his life, the invitation to their graduation — a small folder, on very heavy paper, with scalloped edges. The outside of the folder stated boldly:

PHYSIO-MEDICAL INSTITUTE OF CHICAGO-CLASS of 1891 — with flourishes and fancy script and the inside was as follows:

'CONDITIONES MEDICAL SANITER.'

Compliments of the
Faculty and Graduating Class of the
PHYSIO-MEDICAL INSTITUTE
Of Chicago, Ill.

Yourself and friends are cordially
Invited to attend the
Commencement Exercises,
at Congress Hall,
Congress and Honore Streets
March 14, 1891, 8 P.M.

OFFICERS OF CLASS

President, Nathan Hill, Ohio
First Vice-pres., Virgil Berry, Indian Territory
Second Vice-Pres., Henry T. Roop, Illinois
Secretary, Walter L. Vercoe, England
Treasurer, Hoit Larch, Ohio
Valedictorian, Robert M. Boyd, Missouri

Installment II "Saddlebags, Scalpel and Sheets" will appear in the next issue of *The Journal*. □

UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE CONTINUING MEDICAL EDUCATION COURSE **ALLERGY IN CLINICAL PRACTICE**

NOVEMBER 2 AND 3, 1978

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ALLERGY SECTION, DEPARTMENT OF MEDICINE, OFFICE OF CONTINUING MEDICAL EDUCATION FOR
PHYSICIANS, UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE, OKLAHOMA CITY, OKLAHOMA

COURSE OBJECTIVES:

A spectrum of frequently encountered allergy-related problems will be discussed, including asthma and hay fever, anaphylaxis, drug allergy, stinging insect hypersensitivity, hives and angioedema, and other hypersensitivity states. The primary goal is to provide practical current guidelines for their management which are applicable to a variety of clinical situations and types of practices. Recent developments in diagnosis and treatment will be evaluated. A modicum of basic core material will be presented. Open panel discussions will comprise much of the format of the program.

Program Coordinators: James H. Wells, M.D.
John R. Bozalis, M.D.
James D. Lakin, Ph.D., M.D.

The Office of Continuing Medical Education of the University of Oklahoma College of Medicine certifies that this continuing medical education offering meets the criteria for thirteen (13) hours credit hours in Category 1 Credit of the Physician's Recognition Award of the American Medical Association.

Laboratory Services

The State Health Department Laboratory Service provides microbiological and chemical analyses of human and environmental specimens which are received in the central laboratory in Oklahoma City or in branch laboratories located in Lawton, Muskogee, Hugo, and Elk City.

Emphasis is placed on those analyses which produce information which can be used by the various programs of the Department to identify and control health problems, including early detection of disease, surveillance of communicable diseases and monitoring water supplies, milk and food to protect the health of the public.

Diagnostic services in certain test categories are offered without charge to private physicians and to public and private institutions where such services are mandated by statutes or when these services are not readily available and contribute information of value to pub-



News From The Oklahoma State Department of Health

lic health programs. Services provided directly to the lay public include the examination of animals suspected of having rabies and the bacteriological examination of private water supplies.

The Laboratory Service also administers a proficiency testing and certification program for over 200 laboratories in Oklahoma which perform premarital or prenatal syphilis serology. An approval program for laboratories which perform microbiological examinations of public water supplies or analyze official milk samples under interstate agreements is also provided. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JULY, 1978

DISEASE	JULY 1978	JULY 1977	JUNE 1978	Total To Date	
				1978	1977
Amebiasis	4	5	—	19	14
Brucellosis	1	1	—	3	2
Chickenpox	—	10	—	—	912
Encephalitis, Infectious	2	2	1	11	10
Gonorrhea (Use Form ODH-228)	1256	1074	1300	7768	7293
Hepatitis, A, B, Unspecified	51	47	52	409	448
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	—	—	—	16	10
Meningitis, Aseptic	8	5	6	33	22
Mumps	—	13	—	—	459
Rabies in Animals	11	20	17	126	177
Rheumatic Fever	—	—	—	—	2
Rocky Mountain Spotted Fever	15	8	12	35	51
Rubella	—	2	2	11	29
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	1	2	—	12	54
Salmonellosis	33	29	25	136	127
Shigellosis	30	7	23	166	24
Syphilis, Infectious (Use Form ODH-228)	12	8	10	64	50
Tetanus	—	—	1	2	—
Tuberculosis, New Active	40	20	31	207	191
Tularemia	—	2	3	3	6
Typhoid Fever	—	—	—	2	1
Whooping Cough	—	—	2	8	3

Residency Positions Finally Equal Graduates

For the first time in the state's history, Oklahoma will not have to export its medical school graduates for residency training. Dr Thomas Lynn, dean of the University of Oklahoma College of Medicine, announced recently that there are 210 residency positions now available. The total number of graduates from the OU Medical School and the Oklahoma College of Osteopathic Medicine and Surgery also equals 210. Five years ago there were 85 first-year residency positions available for 136 graduates of the OU medical school.

Lynn said to help retain state-trained doctors, the college of medicine decided in the late 1960's to work toward increasing residency positions, particularly in family practice, and to expand into rural areas. To accomplish this goal, medical school officials had to hurdle a final obstacle since the use of direct state educational appropriations to pay residents is prohibited. The major cost in funding residencies is borne by sponsoring hospitals that pay the first-year residents \$12,500 salary, an amount that increases \$500 each year until a residency is completed. During the past decade medical school officials have worked with affiliated hospitals to increase the number of residencies. They also increased medical school admissions to 176 in 1974.

The Physician Manpower Training Commission, which was created by the Oklahoma Legislature in 1975, has also played a major role in increasing residency positions. The PMTC has been written up in several medical journals and has been studied as a model by other states. Since studies show that 70 percent of residents establish their practice within 80 miles of where they train, attention has also been given to correcting geographical and specialty distribution problems. Family practice residency programs have been started in Enid, Shawnee and Bartlesville, and others are proposed for Lawton and McAlester.

Apparently all this has had a positive effect. This *Journal* reported earlier that only 9,600

Oklahomans now live more than 20 minutes or 15 miles away from primary health care. That represents only 0.3 of 1 percent of the state's population. No county in the state is without a physician, although five have only one.

At the same time, Lynn pointed out, the number of towns below 2,500 in population with a physician has increased from 106 in 1975 to 123 in 1977. □

OSMA Encourages End of AMA NHI Bill

OSMA President Dr Marvin K. Margo has written the Executive Vice-President of the American Medical Association encouraging that the AMA no longer support any type of national health insurance legislation. In his letter Dr Margo pointed out that the OSMA strongly feels "that there is no immediate possibility for adoption of a viable national health insurance program, thus no current justification for the AMA continuing to support same."

Dr Margo did point out that OSMA members felt the AMA should "articulate cogently and responsibly that the present medical care system has been and is effective, and that the expansion of federal participation in this system has caused many of the present medical economic problems." □

OMPAC Spends Money Wisely

The end result of the August 22 primary election indicated that OMPAC successfully supported winning candidates in twenty eight out of thirty primary races. To date OMPAC has contributed/spent approximately \$7,000 on federal races and close to \$7,000 on state elections. OMPAC was involved in about half of the some twenty state run-off elections which were held on September 19. The full OMPAC Board will meet prior to the general election in November to determine those races that will be beneficial for OMPAC to support.

If you are a member of OMPAC, you are encouraged to express your concerns and wishes to a board member in your area. If you are not a member, the OMPAC Board encourages you to put your money to work in political action by joining OMPAC when you receive your November dues statement. □

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HEW Launches Second Opinion Program

The Department of Health, Education and Welfare initiated a nationwide second opinion program on September 12. The program is designed to encourage patients to obtain second opinions on recommended medical care, especially surgical care. It will be carried out by HEW's Health Care Financing Administration and will provide Medicare coverage of second opinions and federal matching funds for similar state Medicaid coverage.

HEW plans to seek coverage from the media and to distribute nationwide a brochure entitled, "Facing Surgery? Why Not Get a Second Opinion?" HEW also plans to use a toll-free telephone number already installed at Aetna Medicare headquarters in Oklahoma City.

The OSMA Board of Trustees has agreed to cooperate by helping to set up second opinion consultations using the same procedure OSMA has used for many years. The board, however, warned that should this program or any other interfere with the established doctor-patient relationship or should it prove to be contrary to good medical practice, the OSMA will withdraw its support and discontinue its cooperation. □

Medical Examiners Hold Two-Day Meeting

The Oklahoma State Board of Medical Examiners held its quarterly meeting September 7 and 8, 1978. The board, the state agency responsible for enforcement of the Medical Practice Act, reviewed over 200 applications for medical licenses and interviewed more than a dozen physicians who had special or disciplinary problems. In addition to issuing MD licenses; the board has jurisdiction over physical therapists and physician assistants.

The seven-member board is appointed by the governor and its members serve staggered terms of seven years. All of the current board members were appointed by either David Hall or David Boren, and none have served prior terms. The board members are Frank Adelman, MD, Enid; J. William McDoniel, MD, Chickasha; Carroll Holstead, MD, Kingfisher; Phillip Kingery, MD, Mangum; Richard L.

Winters, MD, Poteau, and Harry Tate, MD, Oklahoma City, board secretary.

The Board of Medical Examiners staff consists of three inspectors, two executive secretaries, and two clerical assistants. They maintain records and investigate complaints on over 5,300 physicians who hold Oklahoma licenses. Last year the state's physician population grew by 539, of which, 355 indicated they planned to practice in Oklahoma. Over the past few years the board has granted an increasing number of licenses to foreign medical graduates (559 foreign medical graduates currently hold Oklahoma licenses).

Most of the board's disciplinary problems involve alcohol or drug abuse. Annually, over 100 physicians appear before the board for disciplinary action. The board can revoke or suspend a physician's license, place him on probation, or recommend the revocation of his narcotics prescribing privileges. Of the 12 cases appearing before the board, three were continued, six were routine probation visits, one received a two-year probation with partial denial of narcotic prescribing privileges, one received a two-year probation and one-year denial of narcotics prescribing privileges, and one received a six-month suspension, revocation of narcotic prescribing privileges and a five-year probation. □

Data on Sports Injuries To Be Collected

An active effort to create a sports injury registry for secondary schools in the state and to accumulate data about these injuries was initiated in August. Dr William A. Grana, assistant professor of medicine at the OUHSC, received a grant last year to study sports injuries in Oklahoma and is heading up this program.

A person has been hired to aid in the collection of information and to monitor the study. Sharon Shannon will be in contact with both coaches and physicians across the state, and OSMA members are encouraged to participate in the program. There has been some concern about the release of this information without prior authorization from the patient and family. It should be emphasized that this information is for data collection only, and once it is computerized, the patient's name is no longer a part of the record. Physicians who have any questions about this are encouraged to contact Dr Grana. □

Medical Survey Being Conducted

A survey of medical providers in Oklahoma is being conducted as part of the National Medical Care Expenditure Survey. During the past year this group interviewed over 13,000 households across the country, and these individuals participated voluntarily in six detailed interviews about their use of medical services and associated costs.

The survey of physicians which is now being conducted will gather more specific data concerning the care provided to the 13,000 respondents who participated in the earlier survey. Physicians are also being asked about the setting in which they practice.

According to the survey organization, which is sponsored by the U S Public Health Service, this survey will be conducted in strict confidence, and no information which will identify a physician will be released.

If you are contacted and have questions or would like additional information, you may contact: National Medical Care Expenditure Survey, P. O. Box 12138, Research Triangle Park, North Carolina 27709, (919) 549-8311. □

Two Hospitals Given CME Approval

Two more Oklahoma hospitals have been given provisional approval to conduct Category I continuing medical education courses under the guidelines of the American Medical Association's Physicians Recognition Award. Provisional approval was given to Baptist Medical Center and South Community Hospital, both in Oklahoma City. Five state hospitals have now been given approval by the Liaison Committee on Continuing Medical Education to conduct and sponsor Category I CME courses. Other approved institutions are Oklahoma City's St. Anthony Hospital, and Hillcrest Medical Center and St. John's Medical Center in Tulsa.

Emphasis on surveying and accrediting Oklahoma hospitals comes as a result of action taken in 1975 to require continuing medical education for membership in the Oklahoma State Medical Association. This program was approved first in '75 and approved once again in 1976 and in 1978.

Approved hospitals will be able to conduct CME courses for local physicians, thus lessening the need for a physician to leave the state to fulfill the requirements of the AMA PRA. □

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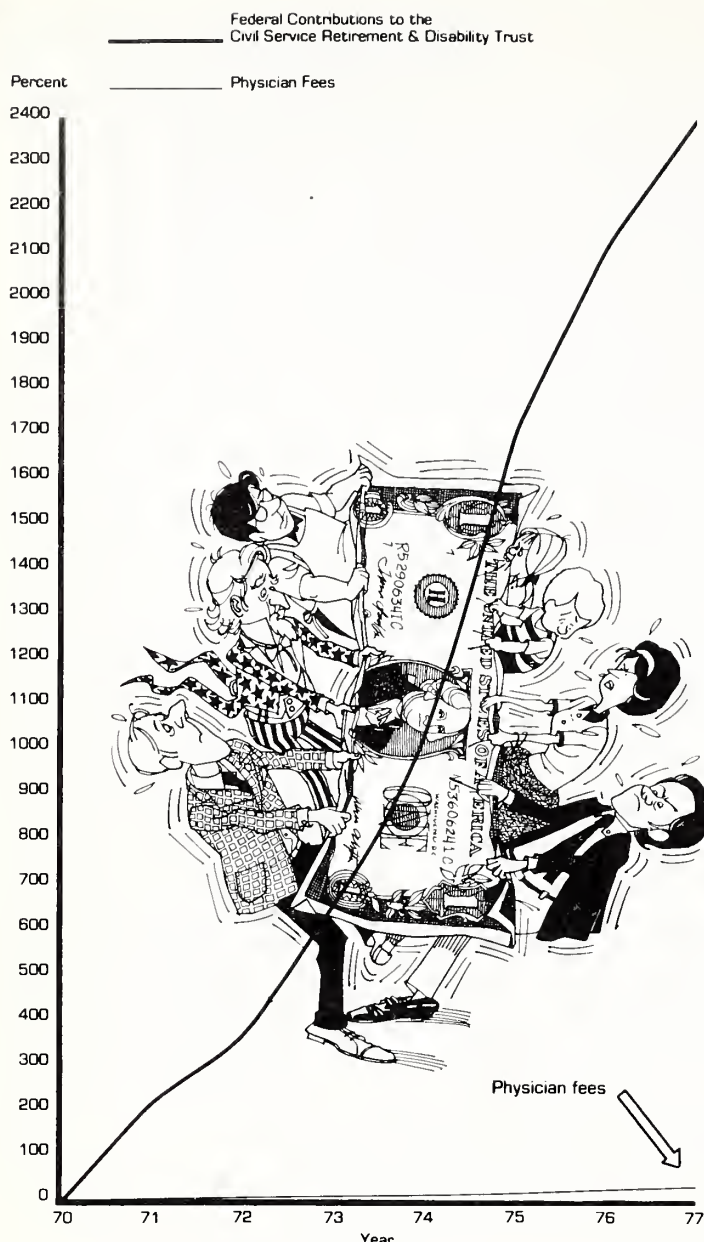
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The battle between the wage earner and the federal government for the worker's salary continues. For example, federal contributions to the Civil Service Retirement and Disability Trust, the government employee's answer to social security, which they want no part of, has increased 2,379.2 percent since 1970. Physicians' fees, which these same employees show tremendous concern for, have increased only a fraction of that. □

Incumbents Usually Win. Here's Why

According to the Americans For Democratic Action, an incumbent candidate for a seat in the US House of Representatives receives benefits and special privileges which give him or her, on the average, over half a million dollars election year advantage over non-incumbent candidates. These figures include a Representative's annual salary of \$57,500, as of February, 1977, staff allowances, the franking privilege, stationery allowance, office

space, etc., have been gathered by the ADA from the official House publication *Congressional Handbook*, and various other sources. Benefits and privileges now total \$567,191.

Benefits for a Member of Congress in 1978

Estimated Value

Representative's annual salary	\$ 57,500
Staff allowance, up to 18 persons	255,144
Allowance for employment of interns ...	1,000
Washington, DC office space (average of 1,310 sq. ft.)	10,480
Five parking spaces (four indoor, one outdoor)	3,500
Furnishings and upkeep for Washington, DC offices	6,000
Allowance for monthly leasing of office equipment	9,000
Allowance for purchase of electrical and mechanical office equipment	5,500
District office space allowance	10,860
District office space allowance for furnishing and equipment for three District offices	27,000
District office expense allowance	2,000
Franking privilege (mass mailings)	100,000
Stationery allowance	6,500
Constituent communication allowance to produce newsletters	5,000
Public Document envelopes (480,000 per year)	4,272
Postage allowance for special delivery	211
House telephone allowance	15,750
Installation cost for telephone system	700
Monthly telephone service fee	2,040
District telephone allowance for up to nine lines	2,160
Travel allowance for Member and staff	6,612
Fund raising advantage (based on average incumbents raised over challengers in 1976)	23,340
71 subscriptions to Congressional Record	3,195
2,500 wall calendars per year	2,500
37 copies of Congressional Directory	358
One copy of the U.S. Code	282
Five subscriptions to the Federal Register ..	250
400 Agricultural Yearbooks	2,920
Bound volume of Congressional Record .	517
500 copies of Our Flag	400
500 copies of the Declaration of Independence and the Constitution of the United States of America	425
1,000 copies of Our American Government	750
500 copies of the Constitution	500
500 copies of How Our Laws are Made	525
GRAND TOTAL	\$567,191



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- Medical Consultations



Would Reject Bakke Again, Says Admissions Chairman

The chairman of the admissions committee at the University of California-Davis that turned down Allen Bakke, says he would do it again.

In a report in the September 15 issue of *American Medical News*, Dr Charles Lowry says:

"Sure, I'd do it again in a minute. On the other hand, I don't feel very badly that Bakke will by court order be starting school here next month."

"I feel a lot of compassion for someone like Bakke, who is obviously qualified to go to medical school. I think of maybe having one of my own children caught in the same situation. But, at the same time, I believe strongly in programs to recruit minority physicians. How are we ever going to make amends to our minorities for the long and bitter bias against them unless we start somewhere?"

Dr Lowrey feels Bakke happened to be the wrong man at the wrong time applying to the wrong place—and, most importantly, at the wrong age. He cites two factors that he says worked against Bakke's admission:

"First, he was too old. Although we don't have an age limit, we do, because of the scarcity of physicians, like to get qualified applicants as young as possible to assure maximum duration of practice. We don't use age as a cutoff, but tend to look a lot harder at anyone past age 28 or 30.

"Second, as a graduate engineer, Bakke already had a profession plus a master's degree. Why not give a chance to the qualified black or chicano who has never before had an opportunity to be a professional?"

Dr Lowrey says, "We thought of our minority recruitment program in terms of a 'goal' rather than a 'quota,' but we did reserve 16 places each year for applicants from minority groups, basically blacks and chicanos. In this part of California, at least, we don't think of orientals as minority."

It was this "slotting" of admissions spaces for minority applicants, Dr Lowrey says, that enabled Bakke to sue successfully. It is likely, the physician adds, that without this "easy target," Bakke would neither have been admitted to medical school on his merits nor been able to press a reverse-bias complaint. □

Health Costs Continue To Concern Public

Although a poll for the Health Insurance Institute of Washington, DC, notes an overall satisfaction by the public for the present health care system, there is fear about rising costs of health care and health insurance and the affordability of these in the future.

There is a general public concern about health, health care and the payment of health care costs, reveals the HII survey of 1,501 people representative of all adults 18 years and older. With various NHI plans being heavily publicized and with health care costs growing, national health insurance is again in the spotlight.

Although 46 percent of the people are very satisfied with their present health care insurance coverage and 36 percent are somewhat satisfied, 67 percent feel that the price of health insurance is getting too high for the av-

erage family to afford. Forty-three percent of the public feel that health insurance through private companies would preserve the individual's freedom of choice in a way a government program could not; only 16 percent disagree. Although there is a feeling that things could be better in the country economically, the majority of the public does not favor delaying national health insurance until the economy improves.

A strong majority of the public (60 percent) favors a national health insurance program run by both government and business; relatively few think it should be run by government (19 percent) or by private industry (15 percent).

On the whole people are relatively satisfied with their health care. Forty-five percent say they are "very satisfied," and another 37 percent are "somewhat satisfied." Fifty-eight percent of Americans feel that they have a great deal of control over their personal health, and 76 percent say they take good or excellent care of their personal health. □

Miscellaneous Advertisements

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POSITION WANTED: General diagnostic radiologist. Oklahoma native, OU graduate trained in general diagnosis, CT scanning, angiography, nuclear medicine and ultrasound. Passed written boards in diagnosis and physics, eligible for orals in June, 1979. Will finish residency June 30, 1979, available July 1, 1979. Contact Key B, c/o *The Journal* of the Oklahoma State Medical Association, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

TWO BOARD CERTIFIED FAMILY PHYSICIANS need third physician. New office connected to new hospital (250 beds) with all ancillary and specialized services available. Any interested physicians please send curriculum vitae to Link, Chapman & Associates, Inc., 1515 West Truman Road, Independence, Missouri, 64050, or call collect 816 836-8200, 9:00 AM to 4:30 PM.

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COMPLETE OFFICE EQUIPMENT for two examining rooms for sale. Contact Dr W. D. Holt, Altus, Oklahoma. 405 482-4530.

UROLOGIST — age 33 with over six years urologic experience available June 30, 1979, when military obligation complete. Part one of Board of Urology completed. All areas of Oklahoma considered. Contact: David W. Buntley, 136 S.W. 75th, Lawton, Oklahoma 73505. □

Lying With Figures

Just to prove a point or two, let us tell some lies. Not real ones, but the kind of lies that statistics tell. Sometimes they are called "obvious conclusions" and sometimes "the clear significance" and sometimes "the real meaning." For example: "Physicians' incomes have risen at a rate almost three times that of other professionals. The real meaning of this fact is that physicians are greedy. It's an obvious conclusion, clearly significant to all Americans." If the fact concerning physicians' incomes is true (an exaggeration if not an outright lie), it follows that the deduction concerning physicians' greed is also true.

Let's proceed to the point. To get there, we will make up some thoroughly fictitious statistics. If in doing so, we lie, so be it.

Approximately 60% of the rise in physicians' incomes over the past eight years is due to the sharp increase in the number of hours per week the average physician works. His hourly income has not risen disproportionately. A breakdown of the factors contributing to the longer work-week reveals the following: 54.6% more time spent completing state and federal health insurance forms; 22.4% more time spent writing and renewing prescriptions made necessary by new state and federal regulations; 18.8% more time spent explaining to pa-

tients why it is necessary to charge for the additional services thus rendered; 4.29% more time spent in justifying claims which were denied by insurance clerks.

An additional 34% of the increase in physicians' incomes results from the fact that they are now being partially paid for services previously rendered as charity. Although the payments rarely represent as much as one-tenth the customary fee for the services rendered, they have increased the incomes of many physicians.

Almost 4% of the doctors' extra dollars have come from fees which have been increased in anticipation of higher malpractice insurance premiums (not yet materialized), a federal freeze on fees, rolling them back some two-to-five years (a bitter memory-lesson) and next year's rise in taxes, social security payments and minimum wages.

Finally, 2% of the increase in physicians' incomes might be attributed to pure greed. Or it could be that even physicians are beginning to think in terms of time-and-a-half and double-time for work done on holidays, week-ends and in the middle of the night. But, just to prove a point, let's call it greed.

Remember now, we've been lying. Our statistics are outrageously fictitious. But, until someone can *prove* they're wrong . . . MRJ

"Almost 30 years ago the respected inventor and industrialist, Charles F. Kettering, observed: 'One of the things we have to be thankful for is that we don't get as much government as we pay for.'



"When he made that statement Federal spending totaled \$42.5 billion. This is not even enough to pay the interest on the public debt now. Unfortunately in this time of one half trillion dollar budgets we may, to our sorrow, be getting all the government we pay for and more.

"The very weight of the numbers and the

complexity of federal finances is almost beyond human comprehension. Recently one of the ablest members of Congress, Barber Conable of New York, used this example to demonstrate how much a billion dollars really is: A million dollars is a stack of thousand dollar bills only two and a half inches high, while a billion dollars is a stack of thousand dollar bills more than 200 feet high. At that rate the current \$500 billion federal budget is equal to a stack of one thousand dollar bills almost 19 miles high." Maynard H. Waterfield, Director of Federal Affairs, Tax Foundation, Inc., Washington, DC.

Enough said!

Marvin K. Margo A.D.

Complete Ureteral Substitution With Intestinal Segments

WILLIAM F. BARNES, MD
RICHARD N. ISAACSON, MD
DONALD B. HALVERSTADT, MD

CASE REPORT

Hydronephrosis secondary to ureteropelvic junction obstruction generally can be resolved satisfactorily with conventional pyeloplasty. Aperistaltic tissues, however, may require urinary diversion or ureteral substitution. General concept and applicability of bowel segments for replacement is reviewed and a case is reported.

A variety of methods to replace the diseased ureter and maintain or reconstruct the urinary tract have been described. According to Lawson¹ ileal substitution for the ureter was first suggested in 1888 by Tizzoni and Foggi.² In 1956 Gil-Vernet³ reported use of an ileocecal segment to replace the ureter and augment or

replace the bladder. The following case report illustrates bilateral ureteral substitution with an ileocecal segment in a child with bilateral ureteropelvic junction obstruction, severe hydronephrosis, and aperistaltic renal pelves.

W. T., a four-year-old white male, was admitted to Oklahoma Children's Memorial Hospital with bilateral abdominal masses ultimately diagnosed to be giant hydronephroses secondary to bilateral ureteropelvic junction obstruction, as shown in Figure 1. Initial blood urea nitrogen was 16 mg/dl, serum creatinine 0.4 mg/dl and creatinine clearance 24 cc per minute per 1.73M.²

A left percutaneous nephrostomy was performed with subsequent good urine output. After stabilization of the patient, right dismembered pyeloplasty was completed, leaving a percutaneous nephrostomy and ureteral stent. After removal of the ureteral stent persistent obstruction was demonstrated by nephrostogram. Retrograde right ureteral catheterization demonstrated patency of the ureteropelvic anastomosis but the renal pelvis would not drain. The child was discharged with bilateral nephrostomy drainage to allow full postoperative recovery.

From the Pediatric Urology Service, Oklahoma Children's Memorial Hospital, Oklahoma City, Oklahoma.



Figure 1.
Giant bilateral hydronephroses secondary to ureteropelvic junction obstruction.

On readmission bilateral antegrade pyelograms again showed no delivery of urine from the renal pelvises. Bilateral dismembered pyeloplasties were performed. After removal of the ureteral stents there was still no delivery of urine from either renal pelvis. Fluoroscopic observation on multiple occasions failed to demonstrate any effective peristaltic contractions in either renal pelvis. With prolonged clamping of the nephrostomy tubes, some urine was seen to traverse the ureteropelvic junctions. However, residual urine in the renal pelvises progressively increased to 250 cc bilaterally. Radiographic studies confirmed progressive hydronephrosis. Intrapelvic pressures, which are normally less than 12 cm. of water pressure, required 20 cm. of water pressure to traverse the ureteropelvic junction. The patient was discharged on continuous nephrostomy drainage.

During a subsequent admission, creatinine clearance was calculated at 22 cc per minute per 1.73 M^2 for the right kidney and 18 cc per

minute per 1.73 M^2 for the left kidney. Serum creatinine was 0.6 mg/dl and BUN 7 mg/dl. It was felt that aperistaltic renal pelvic tissue on both sides contraindicated further attempts at conventional pyeloplasty and that urinary diversion or ureteral substitution was indicated. Decision was made for ureteral substitution. Right ureteral substitution was performed utilizing an ileocecal bowel segment, anastomosing the ileal portion of the segment to the renal pelvis and the cecal portion to the bladder creating a right renal pyeloileoceccocystoplasty, utilizing the ileocecal valve for antireflux function, as illustrated in Figure 2. Postoperatively residual urine in the right renal pelvis decreased to 35 cc. A nephrostogram showed good flow from the residual hydronephrotic kidney through the bowel segment. A voiding cystourethrogram demonstrated complete emptying of the bladder and no reflux of dye past the ileocecal valve mechanism created at surgery. The child was discharged with only the left nephrostomy tube in place.

On the final admission creatinine clearances were 35 cc per minute per 1.73 M^2 for the right

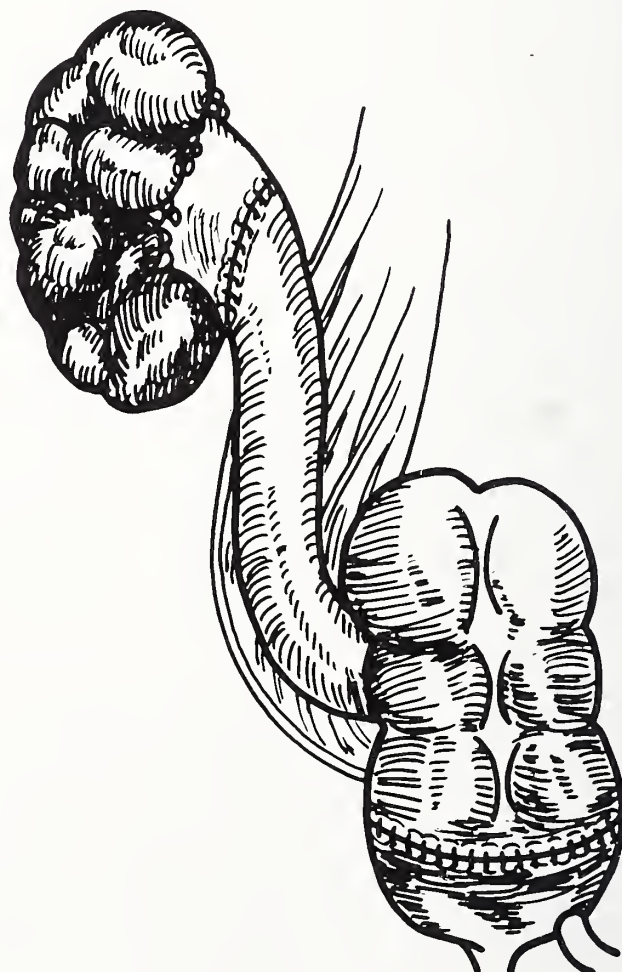


Figure 2.
Right renal pyeloileoceccocystoplasty.

kidney (voided urine) and 48 cc per minute per 1.73 M² for the left kidney (nephrostomy tube) with a serum creatinine of 0.5 mg/dl. Bowel substitution for the left ureter was performed, anastomosing a segment of ileum to the left renal pelvis and to the ileal portion of the ileocececystoplasty creating a left renal pyeloileostomy. Postoperative creatinine clearance was 79 cc per minute per 1.73 M². A nephrostogram demonstrated good drainage from the left kidney. An intravenous pyelogram one week postoperatively showed prompt bilateral function with good drainage on the right and slightly delayed on the left. The patient was discharged with no tubes in place, voiding easily, and free of urinary infection. The bilateral ureteral substitution with bowel segments is illustrated in Figure 3.

SURGICAL TECHNIQUE

The technique described by Gil-Vernet³ was employed in the patient reported above. The ileum was interrupted 12 cm proximal to the ileocecal valve to provide sufficient length of bowel segment to reach the right renal pelvis. The ascending colon was divided 4 cm distal to the ileocecal valve, isolating the cecum with sufficient length for anastomosis with the bladder. The ileocecal mesentery was divided in a fashion to preserve the major arcade of blood vessels to the ileocecal segment. A longer colon segment could have been obtained if needed by dividing the right middle colic ar-

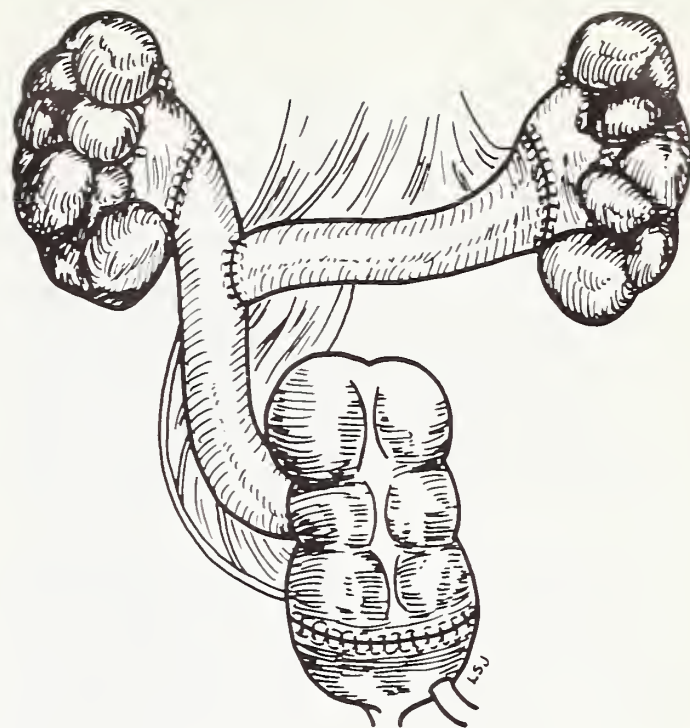


Figure 3.

Right renal pyeloileocececystoplasty and left renal pyeloileostomy.

tery and the colon as far cephalad as the hepatic flexure. The stump of the ascending colon was closed in two layers and intestinal continuity re-established by end-to-side ileocolostomy. The ileocecal segment was rotated nearly 180° counterclockwise. This rotation does not interfere with the blood supply. The ileocecal valve was then plicated to intussuscept the ileum more than normal into the cecum, the right renal pelvis was partially excised and the upper ureter removed. Pyeloileostomy was performed with a single layer of chromic suture. The cecovesical anastomosis was also performed with a single layer closure of chromic suture. Suprapubic drainage was established with a catheter placed through the bladder wall. At the second operation a 10 cm segment of ileum was isolated and anastomosed to the left renal pelvis, which was mobilized through descending mesocolon. This intestinal segment was then anastomosed end-to-side to the ileal portion of the ileocececystoplasty, cephalad to the valve mechanism.

DISCUSSION

Obstruction of the ureteropelvic junction is the most common site of obstruction in the upper urinary tract in infants and children. There is a tendency toward bilaterality in the first year of life especially in boys. An abdomi-

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nal mass, vomiting, failure to thrive, or renal failure may be the presenting symptoms of ureteropelvic junction obstruction in infants. Older children commonly present with gastrointestinal symptoms or recurrent attacks of flank pain. Hematuria, especially after minimal trauma, is a common presenting complaint. Symptoms of urinary infection tend to be uncommon. Physical examination often reveals an abdominal mass which may be indistinguishable from a neoplastic or polycystic process.⁴

Excretory urography is generally diagnostic, demonstrating a dilated renal pelvis. Failure to visualize the distal ureter is the rule if obstruction is significant. Diuresis generally accentuates the degree of obstruction. Cystourethrography is generally indicated as reflux may also cause massive hydronephrosis. However, in the absence of a dilated ureter an excretory urogram is generally sufficient. Retrograde pyelography is rarely required with present radiographic techniques. Antegrade pyelography may be valuable as was the case with the patient described above. Radionuclide renal studies may be of help in poorly functioning kidneys.

A percentage of kidneys will not be salvageable; however, pyeloplasty is generally feasible. Various types of repair of the ureteropelvic junction are utilized, all associated with high degrees of success. It is rare to encounter a patient such as described here with aperistaltic renal pelvic tissue which precludes success with conventional pyeloplasty.

The end result of ureteropelvic junction obstruction is hydronephrosis. If severe enough and present long enough, renal functional impairment will result. Compression of the renal parenchyma causes direct injury. Interference with the blood supply may occur due to back-pressure causing atrophy of the renal parenchyma, especially the medulla.⁵ In a four-year-old child such as described above, the capacity of the renal pelvis is generally three to four cc and the pelvis empties itself in 30 to 40 seconds.⁵ The normal intrapelvic pressure varies from 5-to-25 cm of water depending on flow rate. Low pressures are generally found in a dilated, obstructed pelvis suggesting a state of equilibrium.⁶ Whitaker⁷ determined that in the absence of obstruction, the normal ureter can handle a flow rate of 10 cc per minute at

pressures averaging less than 20 cm of water.

In the situation of aperistaltic renal pelvic tissue or repeated failure with conventional pyeloplasty, either urinary diversion or ureteral substitution is necessary. The advantages of ureteral substitution are an intact urinary tract without appliances or drainage tubes. Relative to the concept of ureteral substitution, nearly 100 techniques and methods have been described for ureteral replacement.⁸ The ideal ureteral substitute should have several characteristics including close resemblance to normal ureter; active peristaltic capability; elimination of urinary stasis; minimal absorptive surface; lack of propensity to foreign body reaction or stone formation; resistance to stenosis at anastomotic points within the urinary tract; and freedom from vesicoureteral reflux.⁸ The evaluation of any ureteral substitute is measured ultimately by preservation of renal function.

Use of the ileum for delivery of urine did not achieve popularity until the 1950's when several authors successfully used the ileum for ureteral substitution.⁹⁻¹² At that time Bricker¹³ popularized cutaneous diversion utilizing the ileum. Subsequently, numerous authors have reported a variety of innovative techniques for ureteral replacement, diversion and reconstruction.^{1, 3, 8, 14-16, 18, 19} Gil-Vernet³ first reported use of the ileocecal segment in 1956 to enlarge the bladder and provide ureteral substitution. The ileocecal segment is a desirable substitute for the ureter since it conveys urine well without significant absorption; provides a potentially non-refluxing valve mechanism; and enlarges the bladder capacity by virtue of the cecal segment which also empties well during micturition.

Indications for ureteral replacement with or without vesicoplasty include ureteral loss secondary to trauma or disease; urologic and non-urologic operations resulting in loss of the ureter; megaureter or dilated ureter due to distal obstruction; and long ureteral strictures or primary ureteral dilation which are not amenable to more conservative reconstructive procedures. Small bladders with reflux and partial or total cystectomy for neoplastic or inflammatory processes represent additional situations which may require ureteral and/or vesical substitution.

Complications with the use of intestinal segments as substitutes for diseased portions of the upper urinary tract and bladder include

hemorrhage, urinary leakage or fistula, chronic urinary infection, anastomotic stenosis and obstruction, intestinal obstruction, vesico-renal reflux, persistent hydronephrosis, and deterioration of renal function. Such complications have occurred with low frequency, however, and have not been a significant deterrent to the use of bowel segments as substitutes for the diseased upper urinary tract.

Long term results with intestinocystoplasty in general and ileocecostoplasty in particular have been quite good.^{1, 3, 16, 18, 19} The ileocecal segment has certain advantages; however, good results have been obtained with a variety of intestinal segments including ileal tapering with ileoureteral anastomosis, ileal tapering with ileoneocystostomy, sigmoidocystoplasty with ureterosigmoid tunneling and ileoneocystostomy with nipple formation.^{14-16, 18, 20} The patients have been appliance free, continent of urine and protected from pyelonephritis.

CONCLUSIONS

Use of intestinal segments for ureteral substitution has found increasing application in recent years as an adequate means to avoid progressive renal damage and urinary diversion. The present case demonstrates complete ureteral substitution in a child with aperistaltic renal pelves and is presented to emphasize the capability for use of bowel segments in urologic surgery in properly selected cases

where urinary diversion would otherwise be necessary.

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Prolapsing Mitral Leaflet Syndrome

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Although only recognized within the last 25 years, prolapsing mitral leaflet syndrome is emerging as one of the most common forms of valvular heart disease.

INTRODUCTION

The auscultatory findings of a mid-systolic click associated with a mid- to late-systolic murmur have been associated in recent years with a clinical syndrome characterized by atypical chest pain, palpitations, dyspnea, neurological and psychiatric disturbances and characteristic electrocardiographic, echocardiographic and angiographic features.¹⁻¹⁰ This syndrome — prolapsing mitral leaflet syndrome — is anatomically and physiologically defined by prolapse of the mitral leaflets into the left atrium during ventricular systole associated with usually mild mitral regurgitation.¹⁰ While generally a benign condition in most patients, morbidity and mortal-

ity in the form of sudden arrhythmic death, bacterial endocarditis and increasing levels of mitral regurgitation are well known. Although only recognized as a distinct syndrome for approximately 20 years, it may be linked historically with "Da Costa's Syndrome" (1871) and "Soldier's Heart" or the "effort syndrome" (1919) which have many clinical features in common with prolapsing mitral leaflet syndrome (PMLS).¹¹ As Barlow is credited with the first recognition and description of the clinical and electrocardiographic features of this entity, it is often referred to as "Barlow's syndrome."

PMLS may be divided into "primary" and "secondary" forms.⁸ Such differentiation has useful prognostic and therapeutic implications, although evidence for the existence of definite causal relationships between "secondary" PMLS and the associated disorder is usually lacking. Thus, PMLS has been associated with the Marfan syndrome,^{2,12} rheumatic fever,² Turner's syndrome,¹³ Ehlers-Danlos syndrome,⁸ relapsing polychondritis,¹⁴ secundum atrial septal defect (ASD),^{2,13} idiopathic hypertrophic subaortic stenosis (IHSS),^{2,10,15} ischemic heart disease,² chest trauma¹⁰ and periarteritis nodosa.¹⁰ A familial pattern is occasionally seen,⁹ but in many, if not most patients, PMLS exists unassociated with any other diseases^{16,17,18} and in such cases may be considered "primary."⁸

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INCIDENCE

PMLS shows a female:male ratio of 1.4-1.8:1.^{3,17} It is usually first discovered in the fourth decade of life, ages ranging from 15 to 76 years in one study.^{3,17} In a study of 100 healthy college-age females, 10% had echocardiographic and phonocardiographic evidence of PMLS.¹⁶ Another study of 1169 females, average age 32 years, documented PMLS in 6.3%.¹⁸

CLINICAL SYMPTOMS AND SIGNS

Patients with PMLS may present with typical auscultatory signs with or without symptoms. Conversely, symptomatic patients may have a click and/or a murmur revealed only with special maneuvers. Furthermore, patients may have neither symptoms nor signs of PMLS while mitral leaflet prolapse may be seen on echocardiography or angiography performed for other reasons.

SYMPTOMS

The most frequent presenting complaint in patients with PMLS is chest pain, which is usually described as "atypical" to distinguish it from the "typical" pain of angina pectoris. The pain is often poorly characterized, located in the left precordium, is often sharp and may be fleeting or last for hours.^{3,9} It may or may not be related to exercise or emotional stress.³ Although usually not the typical pain pattern seen in angina pectoris, the chest pain of PMLS may mimic the pain of ischemic heart disease. That PMLS and coronary artery disease may coexist in some patients must be borne in mind.

Palpitations, a symptom of an underlying atrial or ventricular arrhythmia, are also a frequent presenting complaint,^{3,9,19} and may be associated with dizziness or syncope.¹⁹

Fatigue and dyspnea are frequent presenting or associated complaints.⁹

Less frequently, major neurological disturbances in the form of transient ischemic attacks (TIA) may be the presenting symptomatology.³ Normal cerebral circulation has been documented in several such patients.³

Symptoms of a neuropsychiatric type are not infrequent³ and may suggest associated neuroses, psychoses or hyperventilation.⁸ Abnormal Minnesota Multiphasic Personality Inventory results have been noted in some symp-

tomatic patients and are less common in asymptomatic patients.⁴

SIGNS

Physical examination may reveal an irregular and, in some patients, a hyperkinetic pulse.⁸

The classic auscultatory signs of PMLS are a mid-systolic click and a mid- to late-systolic murmur. While both click and murmur are present in the "classic" case, one or the other or both may defy discovery at any one single examination.⁸

The click of PMLS, although classically described as mid-systolic may, in fact, occur at any time during systole and may even fuse with the first or second heart sound.²⁰ The click is heard best with the diaphragm of the stethoscope at the apex or lower left sternal border.⁸ The click is distinguished from aortic or pulmonic ejection clicks by its mobility: moving temporarily closer to S1 with standing, during the straining phase of the Valsalva maneuver, in postextrasystolic beats and with amyl nitrite inhalation,^{9,20,21} and moving further from S1 with squatting, during the release phase of the Valsalva and phenylephrine injection.^{17,20,21} Though often single, clicks may be multiple.⁹ In one patient, the click was heard only over the left neck, while the murmur (without the click) was heard at the apex.²²

The murmur of PMLS is classically ushered in by the mid-systolic click and is best heard at the apex or over the left precordium.⁸ It is usually of grade III/VI intensity or less and may be best heard in the left lateral decubitus position.⁹ Radiation of the murmur to the axilla, carotids or base of the heart has been reported.⁸ The murmur is decreased in intensity and moves to an earlier time in systole (along with the click) with amyl nitrite inhalation and during the straining phase of the Valsalva maneuver.^{1,9} The intensity of the murmur increases with phenylephrine admin-

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istration.^{7,9} Although inapparent with any maneuvers performed at rest, the murmur may be evident following exercise.⁸ While the click of PMLS typically ushers in the late systolic murmur, the murmur may precede the click and may extend beyond the aortic closure sound.⁸

Clinically one may need to distinguish between the murmur of rheumatic mitral regurgitation, which is pansystolic, and the murmur of PMLS which also may be pansystolic. The diagnosis of PMLS is supported if there is late accentuation of the murmur, S1 is not increased in intensity, no opening snap is heard, multiple PVC's are noted, the characteristic ECG pattern of PMLS is noted, there is lack of calcification of the mitral valve and when symptoms of chest pain, palpitations and dyspnea exist with normal left ventricular and left atrial size.¹⁷ In addition, while squatting reduces the duration of the murmur in PMLS, mitral regurgitation of rheumatic origin is usually increased in intensity and remains holosystolic.²¹

Symptomatic patients may have no auscultatory signs of PMLS following any maneuvers designed to bring them out, and yet have echocardiographic findings diagnostic of PMLS — so-called "silent prolapse."¹⁷

DIAGNOSIS

The discovery of the auscultatory signs typical of PMLS in a symptomatic or asymptomatic patient requires that secondary and primary forms of PMLS be differentiated since this differentiation has prognostic and therapeutic, though not necessarily, etiologic, implications.

The history may reveal episodes of rheumatic fever or may document a family history of a heart murmur.^{2,9} Pain patterns and characteristics may reveal features of true angina pectoris due to underlying coronary artery disease with PMLS existing as either a result of underlying papillary muscle dysfunction⁸ or in chance association.¹⁷ Rarely, a history of chest trauma or periarteritis nodosa is elicited.¹⁰

Physical examination may reveal skeletal and ophthalmologic stigmata of the Marfan syndrome.^{2,12} Skeletal features without ectopia lentis may suggest a 'forme fruste' of the Marfan syndrome.³⁰ Typical physical stigmata of Turner's syndrome,¹³ relapsing polychondritis,¹⁴ or Ehlers-Danlos syndrome⁸ may

exist in association with signs and symptoms of PMLS. A wide, fixed splitting of the second heart sound may suggest associated ASD.^{2,13} The murmur of IHSS may increase and decrease in intensity with the same maneuvers that increase and decrease the murmur of PMLS — thus, differentiation may be particularly difficult in these cases.⁸ A hyperkinetic and bifid carotid pulse may suggest IHSS.^{2,10}

SPECIAL STUDIES

Some special studies are indicated in PMLS for diagnosis, as baseline studies useful in following these patients, and for the detection of potential complications or associated diseases.

The chest x-ray, although usually not helpful in diagnosis and usually normal in PMLS⁸ will serve as a baseline, useful in detecting potential increasingly severe degrees of mitral regurgitation and heart failure seen in a few patients.²³

The ECG in PMLS may reveal the classic pattern of T-wave inversion in leads II, III and AVF and occasionally in V5 and V6⁷, although it is more often normal. In some patients a prolonged QT interval may be seen.²⁷ Holter monitoring may reveal supraventricular or complex ventricular arrhythmias not seen on the resting ECG that may require therapy.^{8,24} Since arrhythmias are more frequent after exercise in some patients with PMLS,^{8,15} stress electrocardiography may be of value in the diagnostic workup of such patients. This study may also help clarify the underlying pathology responsible for chest pain in patients who may have primary or secondary PMLS with ischemic heart disease.

Diagnostically, echocardiography is the most useful study in the workup of patients with PMLS. In contrast to the normal gradual anterior migration of the mitral leaflets toward the chest wall in systole, patients with PMLS show one or the other of two characteristic patterns on the echocardiogram: (1) a biphasic posterior motion of the leaflets during systole with a mid-systolic notch or (2) a monophasic posterior excursion of the leaflets throughout systole.⁶ The redundancy of the valves may be represented in the echocardiogram by multiple echoes off the leaflets. It is to be noted that a false-negative rate of 10% in the diagnosis of PMLS by echocardiography was noted in one study.³ The echocardiogram may also help in revealing an enlarged right ventricle in pa-

tients with an ASD, and may help reveal IHSS in patients with PMLS associated with this disorder.¹⁵

The phonocardiogram and carotid pulse tracing are probably not useful in the evaluation of patients at the present time, having been largely replaced by the echocardiogram.

Left ventriculography is the definitive study in the diagnosis of mitral prolapse,⁸ but is rarely indicated in patients with PMLS. Assessing the severity of an ASD for surgical repair, increasing levels of mitral regurgitation requiring possible surgery, intractable chest pain and the like may indicate the need for such an invasive study.

PATHOLOGY AND PATHOPHYSIOLOGY

In cases of confirmed PMLS from which necropsy or surgical specimens have been obtained the mitral leaflets are described grossly as redundant and voluminous with elongated, redundant and thickened chordae.^{8,9,17,26,27} Microscopically, the leaflets show replacement of the normal dense fibrous connective tissue by myxomatous tissue.^{26,28} Certain of the secondary forms of PMLS have also been shown to have myxomatous degeneration of the mitral valve as the underlying pathologic lesion. Thus, in patients with the Marfan syndrome¹⁷ and in its 'forme fruste',³⁰ myxomatous degeneration of the mitral valve underlies the PMLS. Myxomatous degeneration of the aortic wall, resulting in aortic insufficiency, occurs in some patients with relapsing polychondritis and it is conjectured that secondary PMLS seen in some of these patients may be due to similar tissue changes occurring in the mitral valve.¹⁴

In those forms of PMLS associated with myxomatous degeneration of the mitral valve, the large, lax and voluminous mitral leaflets existing in a normal-sized left ventricle results in what has been called "ventriculo-valvular disproportion."⁸ Thus, as systole progresses and the left ventricular chamber volume decreases, a critical left ventricular dimension is reached, usually in mid-systole. As systole continues and the ventricular volume falls below this critical volume, prolapse of the voluminous leaflets into the left atrium occurs. The click is produced at the time of maximal prolapse of the leaflet(s).¹⁰ Normal apposition of the leaflets may be lost as prolapse occurs and is responsible for the mitral regurgitation and late-systolic murmur often heard in this

syndrome.⁸ The anatomic position of the posterior leaflet of the mitral valve in a plane perpendicular to the flow of blood during ejection is said to account for its more frequent involvement in prolapse than the anterior leaflet which lies more parallel to the flow of blood during the ejection phase.⁸

Changes in auscultatory signs in PMLS with various maneuvers are explained on the basis of changes in the left ventricular end-diastolic volume (LVEDV) induced by these maneuvers. Thus assumption of the erect posture, during the straining phase of the Valsalva and following amyl nitrite inhalation there is a decrease in venous return, thus reducing the LVEDV.²⁰ If the left ventricle begins contraction at a smaller volume, then the critical left ventricular volume at which prolapse and the click occur is reached earlier in systole — and hence, the click occurs closer to S1.²⁰ Squatting from an erect position and during the release phase of the Valsalva venous return to the heart is augmented, the LVEDV is increased, the critical left ventricular dimension at which prolapse occurs is reached later in systole and thus, prolapse of the mitral valve and the resulting click occur further in time from S1.²⁰ In postextrasystolic beats, the LVEDV is increased over the LVEDV of normal or extrasystolic beats. However, in postextrasystolic beats there is an increased velocity of circumferential fiber shortening (postextrasystolic potentiation). Therefore, the critical left ventricular volume at which prolapse occurs is reached sooner, not on the basis of a reduction in LVEDV, but on the basis of increased velocity of fiber shortening, and the click in postextrasystolic beats occurs either in its usual position in systole or even closer to S1.²¹

The timing of the late systolic murmur is expected to vary with the same maneuvers which move the click closer and further from S1, and this is, indeed the case. In those patients in whom the murmur precedes the click, loss of apposition of the leaflets prior to prolapse probably accounts for the early murmur. Reduction of the afterload on the left ventricle with amyl nitrite allows a greater proportion of blood to be ejected through the aorta than through the mitral valve into the left atrium during systole, thus reducing the intensity of the murmur. Phenylephrine, which increases the afterload, increases the proportion of regurgitant flow through the mitral valve and thus augments the intensity of the murmur.

As the posterior leaflet billows into the left atrium, pull is exerted upon the attached chordae and associated papillary muscle and its subjacent myocardium. It is this pull upon the posteromedial papillary muscle by the prolapsing leaflet, thought to result in ischemia of the papillary muscle and its subjacent myocardium that is invoked to explain the characteristic ECG pattern of T-wave inversion in leads II, III and AVF,² and also to explain the chest pain so often seen in symptomatic patients.¹⁷

The billowing leaflets will collect within their scallops a certain volume of blood during systole which, upon completion of systole, will be "dumped" back into the left ventricle: this "diastolic dumping" of blood is thought to mechanically stimulate the ventricle and be the source of the frequent premature ventricular contractions (PVC's) seen in the clinical syndrome.⁸ In addition, atrial premature contractions are thought to arise from stretch of the leaflets during systole leading to spontaneous depolarization of the intrinsic cardiac muscle of the valve cusps — the impulse being propagated in retrograde fashion from the leaflets into the atrium, causing the atrial premature contractions (APC's).⁸ Obviously, the more complex and serious arrhythmias are not so easily explained.

While the above serves to explain the pathophysiology of primary PMLS and secondary forms of PMLS associated with myxomatous degeneration of the mitral valve, the other secondary forms of PMLS have been thought to have different pathogenic mechanisms. It should be recalled that the division of PMLS into primary and secondary forms is designed to aid the clinician in differential diagnosis and is not an etiologic classification. Thus, myxomatous degeneration of the mitral leaflets may not underlie the pathophysiology of PMLS associated with ischemic heart disease, IHSS, ASD, rheumatic heart disease, Turner's syndrome, periarteritis nodosa, and Ehlers-Danlos syndrome. If myxomatous degeneration of the mitral valve does occur in these secondary forms, then it is likely that it exists in chance association rather than in causal relation with the associated diseases,¹⁷ although this is not entirely clear at this time.

Thus, in the absence of myxomatous degeneration of the mitral valve, prolapse of the leaflets in IHSS is ascribed to a form of

ventriculo-valvular disproportion in which the left ventricular chamber size is reduced by the septal hypertrophy and by the hypercontractility of the inferobasal portion of the left ventricle. The "normal-sized" mitral valve existing in a "smaller" left ventricle leads to a mid-systolic prolapse of the mitral leaflets and the resulting click and murmur.¹⁵

In secondary PMLS associated with an ASD, it is thought that during ventricular systole there is a lack of a so-called "atrial resistance" to prolapse caused by the systolic run-off of left atrial blood into the right atrium through the ASD.⁸ This explanation seems unlikely, however, as closure of the ASD in patients with this form of secondary PMLS does not result in disappearance of the click.^{13,17} Thus, although an ASD and PMLS often coexist, how they are related etiologically is not known.

As is well known, papillary muscle dysfunction secondary to ischemic heart disease may be a cause of mitral regurgitation. Secondary PMLS may be associated with coronary artery disease on this basis, or may exist in chance association as "primary" PMLS. The most important reason for including coronary artery disease as a "secondary" form of PMLS is that it needs inclusion in the differential diagnosis of even so-called "atypical" chest pain.

The relationship between Turner's syndrome, periarteritis nodosa, chest trauma and Ehlers-Danlos syndrome and PMLS is not clear.

An interesting parallel is suggested by Jeresaty¹⁷ between experimental lathyrism in birds and myxomatous degeneration of the mitral valve resulting in PMLS in humans. Could idiopathic PMLS have as its pathogenic basis some kind of tissue reaction in the mitral leaflet to some unknown ingested chemical(s)? An interesting idea, as yet unproved.

Pomerance,²⁸ in her study of necropsy specimens of mitral valves that showed myxomatous degeneration, demonstrated that the stretch of the voluminous and lax leaflets could lead to breaks in the normally continuous endothelial lining of the valve surfaces. Fibrin depositions were noted microscopically on the valve surfaces. These may serve as a nidus for infective endocarditis.^{28,29} They may also underlie the pathogenesis of possible emboli resulting in the TIA seen in some patients.

PROGNOSIS

In the absence of long-term prospective

studies involving large numbers of patients with PMLS, a sound basis for prognostication is lacking. Probably the strongest argument in support of the generally benign prognosis in this disease is that it is so prevalent; and for so prevalent a disorder, one sees only infrequent morbid complications. Studies that are available currently, also suggest that the prognosis in primary PMLS is generally benign, while that of secondary PMLS is that of the associated disease.^{8,23,27} Nevertheless, serious morbidity and mortality are well known in primary PMLS and center around the development of bacterial endocarditis, sudden arrhythmic death or symptomatic arrhythmias and increasing degrees of mitral regurgitation.

Patients with PMLS appear to have an increased risk of developing bacterial endocarditis.^{23,31} Indeed, over 10% of patients admitted to a hospital with infective endocarditis had underlying PMLS in one study.²⁶ Recently, it has been suggested that patients with a late systolic murmur (with or without a click) are at greater risk of developing bacterial endocarditis than those with click alone.²⁷ There is a suggestion that males may be more prone to this complication than females.^{23,26,27}

Sudden death from arrhythmias has been reported to occur in 1.4% of patients with PMLS who have arrhythmias.¹⁹ Patients with abnormal resting ECG's may constitute a subgroup at higher risk for the development of serious ventricular arrhythmias than those with normal resting ECG's.²⁴

Increasing levels of mitral regurgitation have been reported in some patients with PMLS,²³ though they are few in number.

More recently, morbidity in the form of TIA in patients with normal cerebral circulation has been reported.³ Whether or not this represents effects of emboli originating on the mitral leaflets remains to be studied.

THERAPY

In general, arrhythmias do not require therapy unless symptomatic or life-threatening. Indications for antiarrhythmic therapy include frequent PVC's, multi-form or paired PVC's, supraventricular or ventricular tachycardias and symptomatic arrhythmias (eg, those causing syncope). Propranolol, usually in dosages ranging between 40 and 160 mg per day in divided doses, is the drug of choice for initial management.⁸ If not successful, the addition of diphenylhydantoin with

propranolol therapy may be of value.⁹ Quinidine needs to be used with caution in patients with prolonged QT intervals, may be contraindicated in such patients since they are prone to the development of "quinidine syncope"²⁵ — sudden death in such patients has been reported.^{13,27}

The use of antibiotics in anticipation of procedures known to result in bacteremia (dental manipulations, urethral catheterization, obstetric procedures, etc) as prophylaxis against bacterial endocarditis is usually recommended.⁸ Recently, it has been suggested that patients with a murmur (with or without a click) are at greater risk of developing infective endocarditis than those with click alone, and that prophylaxis be recommended only for those with a murmur.²⁷ This study, however, was retrospective and involved a relatively small number of patients. Furthermore, the known variability in the appearance of the click and murmur make such a therapeutic recommendation untenable and ill-advised at this time.

Disabling chest pain in patients with PMLS may respond to propranolol.¹⁷ Rarely, when mitral regurgitation becomes severe, mitral valve replacement is indicated.^{8,17,29}

With the recognition of symptoms possibly secondary to embolic phenomena associated with PMLS, the future may hold anticoagulant therapy for patients so afflicted. This is not recommended currently in the absence of any studies either proving the existence of embolic phenomena in PMLS or demonstrating the effectiveness of anticoagulant therapy in the treatment of these patients.

CONCLUSIONS

Prolapsing mitral valve syndrome is emerging as one of the most common forms of mitral regurgitation and presents a varied and fascinating spectrum of clinical signs and symptoms. Although usually primary, PMLS may exist in association with other diseases, being either causally related or in chance association. The most important and prevalent of these associated disorders is coronary artery disease which needs to be ruled out in any patient with "atypical" chest pain. Other associated diseases need to be ruled out because of differences in prognosis and therapy that would obtain should they exist with PMLS.

Although much of the pathophysiology that underlies this syndrome has been worked out,

much remains to be discovered. The mechanism(s) responsible for the complex ventricular arrhythmias occasionally seen, the explanation for symptoms of dyspnea and fatigue so frequently a part of the clinical syndrome, and the neuropsychiatric disturbances from neuroses to transient ischemic attacks not infrequently encountered, all remain unexplained at the present time.

Probably the most difficult and troubling aspect of managing patients with PMLS is the task the physician has in educating his patients regarding the significance, prognosis and therapeutics of his disease. Typically, the patient is young, with the promise of a full, healthy life before him. It is not difficult to imagine the destructive psychological effects the diagnosis of PMLS can have on such patients. It is the physician's most difficult and important task to avoid creating a "cardiac cripple" from a patient whose prognosis is generally so benign, but for whom certain therapeutic measures need to be taken during the rest of his life. It is hoped that future long-term prospective studies of large groups of patients will serve to distinguish subgroups of patients with PMLS who have different prognostic and therapeutic outlooks.

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Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD

II. Saddlebags, Scalpel and Sheets

MARGARET BERRY BLAIR
with the collaboration of
R. PALMER HOWARD, MD

In the first chapter, Virgil Berry left his family on an Indiana farm in 1886 to strike out for himself. The Oklahoma "boomers" drew him toward the Indian Territory. His perseverance and thrift in Missouri enabled him to enter a Chicago medical college. After the first year the young pioneer, with a scantily equipped doctor's bag, arrived in the Indian Territory to practice. A chance meeting with the beautiful Emma Kate James added a romantic hope to his career aspirations. "Doctor" Berry's medical experience and resourcefulness in collecting his just fees from the Indians and newcomers near Chouteau, Cherokee Nation, were vividly recounted. After

practicing medicine a year and a half, he re-entered medical school and graduated from the Chicago Physio-Medical Institute on March 14, 1891.

The second chapter continues the adventures of the pioneer doctor in Wagoner, Indian Territory.

March 14th, 1891! It was Virgil's twenty-fifth birthday! What an indescribably precious gift it was to him. That spring, Virgil was offered a place on the staff of a clinic in Kansas City, Missouri. It was a flattering offer and he might have accepted if he had not already tasted the heady experience of the Territory — and if there were not a girl from Tennessee waiting there.

His heart beating with the rhythm of the wheels, Virgil clicked off the miles as the train sped toward the Territory. He had had his sheepskin framed before leaving Chicago and now held it, wrapped in brown paper, close beside him. Stepping off the train he saw at once that in the year of his absence Wagoner had rapidly outstripped Chouteau and he felt sure he would locate there. There were two new general stores and S. S. Cobb (his good part-Cherokee friend) had put in a complete country drug store, the first in Wagoner. A cotton gin

Reprints of the entire manuscript will be available subsequent to the publication of the concluding installment. Separate-installment reprints are not available. Requests for reprints will be acknowledged only after the publication of the final installment. Address requests c/o Dr R. Palmer Howard, History of Medicine Program, OUHSC, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

was planned — and it pleased Virgil no end to realize that if he located there he would be the first doctor to open an office.

He brushed the railroad cinders from his brand new black suit, hired a pony, and drove across Fourteen Mile Creek on the familiar trail to the Spears' place. The reunion with Emma Kate, five brothers and sisters, Capt Billy, and the McMahons could have been heard for miles. Aunt Mollie announced that she had purposely stayed well until Virgil's return and now intended to get sick!

When they were finally alone, Virgil asked Emma Kate if he might start building a house in Wagoner — a home for them — and she said yes. Panic seized him on the ride back to Wagoner. Grandfather Sides' admonition returned to haunt him. How could he build and furnish a house for his bride with no funds?

The year before, Samuel S. Cobb, the druggist (everyone called him Sam), and he had become fast friends, so on arriving back in Wagoner it was natural to confide in him. Virgil was astonished when Sam was not in the least dismayed and told him to return in the morning for a letter he would write. Next morning he dropped by the drug store and Sam handed him a letter of introduction to "Uncle" Jimmy Patterson, an old Scottish merchant of Muskogee, simply telling him that Virgil was OK for credit. Virgil caught the southbound Katy and a clerk at the Patterson Mercantile Company's store directed him to where the old gentleman sat on a split-bottom chair near the back.

Uncle Jimmy, as everyone called him, was around seventy-five years old, a bachelor, and had been a schoolteacher in his early years. He had made a sizable fortune trading with early settlers and Indians. After reading Sam's letter of introduction, Uncle Jimmy looked up at the nervous young man and his shrewd old eyes began to crinkle around the edges and he said, "Doctor, how much do you want?" "Three hundred dollars," Virgil said quickly. Immediately, Uncle Jimmy tapped his cane on the floor and his bookkeeper came from an old-fashioned high desk, took his orders and returned with a draft for the money. Virgil stammered his thanks and walked on clouds to the depot nearby to wait for the evening Katy north. (The money was repaid within the year at 7% interest, when the few banks in the Ter-

ritory were charging 10 to 15%. No security had been asked.)

It soon became noised about that the doctor was working on a little house in his spare time — and later it was noted that Alec Cobb, Sam's brother and a fine builder, had taken over for the impatient doctor. The house consisted of two 14-by-14-foot rooms with a kitchen in the rear. It was a plain frame dwelling, simply but solidly built of first class lumber. It cost less than \$400 complete, painting and papering included. Solid oak furniture was to come from a factory in Ft Smith, hauled overland by a former patient in his wagon, because it was cheaper than by the train.

Annie Laura, just younger than Emma Kate, took over the care of the younger James children under the supervision of languid Aunt Mollie, thus freeing Emma Kate to go away and marry her doctor.

With feverish haste the little house was finally completed and the *Wagoner*, *I. T. Times*, reported on October 23rd, 1891:

Married at the residence of the bride's father on Fourteen Mile Creek, Cherokee Nation, Dr. Virgil Berry and Miss Emma Kate James. They will come to Wagoner and occupy the handsome cottage that the doctor has prepared. The groom, since locating here has enjoyed a large practice, and as he has himself said, has come to stay and grow up with the country. His accomplished bride will prove to be quite an addition to the society of Wagoner.

There was no money for a honeymoon so they were soon settled in their "handsome cottage."

Emma Kate proved herself to be the perfect wife for a pioneer doctor. Her quiet capability coupled with a great compassion for people in trouble became one of Virgil's greatest assets. Initiation into her new role came very soon and turned out to be more dramatic than either of them anticipated.

A Cherokee woman named Martha—, was brought by wagon to Virgil's office from the country suffering from "pelvic infection." She was in very serious condition and should have been placed in a hospital, but there was no hospital in the area. If she was to be relieved of her agony, drastic measures must be taken and Virgil hesitantly asked his bride if he might take Martha into their spotless little house and, with her help, operate in the kitchen. Pushing her fears aside Emma Kate agreed. Chloroform was the anesthetic of the time, and with Virgil's instructions, Emma Kate administered the slow drops onto the cone there

on her scrubbed kitchen table, while Virgil opened the woman's abdomen and removed diseased growths and placed drainage tubes for the infection. Virgil was always sure that Martha's miraculous survival was due in no small part to Emma Kate's nursing in the days that followed.

In two weeks Martha was ready to be taken home — but neither the doctor nor his nurse were prepared for what followed.

Martha was of good reputation, but her white husband, Dick, had the reputation of being somewhat of a rascal. Martha was happy to write a check for \$250, Virgil's largest fee to date, on the First National Bank of Muskogee, as she had recently received a large sum from the "Cherokee Indian Land Funds." Dick must have had other plans for the money, for he somehow learned about the check and got on the southbound train for Muskogee intending to stop payment. Sam Cobb heard about Dick's intentions from the loungers in the drug store and ran the two blocks to Virgil's office with the news. Grabbing his hat, Virgil loped down to the depot just as the train was pulling out. He managed to jump aboard the last coach, which, fortunately, was not the one Dick was riding. He jumped off before the train stopped completely in Muskogee, rushed to the bank and cashed the check. He was his own collection agent!



Emma Kate Berry, around 1900.

VIRGIL BERRY, MD

Chronology

II. Saddlebags, Scalpel and Sheets

March, 1891—Relocated in Wagoner, Creek Nation to practice; married Emma Kate James in October.

March 11, 1894—After he had obtained a license to practice medicine in the Creek Nation for several years, he was appointed secretary of the Medical Board of the Western District of Indian Territory in Muskogee.

Autumn, 1894—Attended Beaumont Hospital Medical College in St. Louis; this was a forerunner of St. Louis University Medical School.

Spring, 1895—Received MD degree from this medical college, which was recognized by the Association of Medical Colleges, and approved by the AMA.

May, 1895—For the next three years practiced in Wagoner, Creek Nation

Gray's Anatomy, experience, and the two college years were beginning to make Virgil a more competent physician and he began to hope for laws and an organized association of the few doctors in the Territory. Soon he learned that a fledgling association was already in operation and that the doctors involved were of the highest quality, but distances and calls on the time of those few doctors were so great that things moved slowly. They did not have laboratories, nurses, or hospitals, but they were resourceful, with an abundance of common sense.

Among the prominent doctors of those and later days were Doctors Benjamin F. Fortner of Vinita, Eben N. Allen of McAlester, George R. Rucker of Eufaula, James S. Fulton of Atoka, J. O. Callahan and Francis B. Fite of Muskogee, Eliphalet N. Wright of Olney, Fred S. Clinton of Tulsa, and LeRoy Long of Caddo and later of McAlester. Doctors Fortner and Long were in the forefront of every movement to advance scientific medicine in the old Territory and later in the new State. Virgil appreciated the leadership of these two men from their first meeting.^{1b} Of great concern among the reputable doctors in the Territory was the fact that any quack who paid \$25.00 for a "diploma" as a medical graduate could "practice" medicine without being required to meet any qualifications whatsoever. The only medical laws were

those enacted by the Indian national councils. Most of these required that non-Indians practicing medicine without proper authority be expelled from their borders as intruders, but the United States Agent in Muskogee rarely enforced the regulations.²⁻⁵

More restrictive than the local medical practice laws were the original conditions for membership in the Indian Territory Medical Association. Applicants must agree to abide by the Code of Ethics of the American Medical Association and establish their graduation from a medical college approved by the AMA.² A degree from the Physio-Medical Institute did not qualify Virgil for membership when he began practice in Wagoner. The Association meetings were held in Muskogee and other junction points on the railroads. Along with an exchange of ideas for the development of the country and laws controlling the practice of medicine, they realized the value of exchanging and pooling their medical knowledge. A large part of the agenda consisted of professional papers and appropriate discussion by the members and visiting doctors from "the States."

The need for medical regulations was brought home to Virgil in a shocking manner very soon after his return to Wagoner. One morning, there entered on the scene a character calling himself, "Doctor." Bald, fat, perhaps fifty years old, he rode into town in a horse and buggy. His buxom young wife rode by his side and a black banjo "picker" sat on the back of the buggy. He stopped in the middle of Main street, the banjo sounded out a moment, and then in a very loud voice he announced that he had "electric belts" for sale, guaranteed to cure anything from "lumps to lumbago." He made several passes up and down the street repeating his first performance and adding an invitation for all to gather that afternoon at his office near the drug store.

There was not one thing Virgil could do — until one day late in the evening, a rider came galloping up to the house just as Emma Kate was putting a hot supper on the table. He called to Virgil that he was needed across Grand River and to hurry as fast as possible — a child was "terrible sick." On questioning the boy he learned that it was the small child of his friend, the river ferryman, John Charbenear. Following the rider, Virgil arrived at a small

cabin and found that the child had just died.

The parents and friends were gathered around the small still figure, weeping. A fire flickered in the open fireplace and a dim oil lamp sat on the board that served as mantel, barely lighting the figure of an ancient grandmother holding an ash poultice no longer needed, if it ever was. It was a fitting scene for the tragedy that had just been enacted. Virgil's questioning revealed the information that the child had been taken with croup (their diagnosis) and the new "doctor" had been called. Among other remedies, the "doctor" had left a small vial of liquid with instructions that if the child grew worse to give a teaspoonful, adding that it was a sure cure for "membranous croup." The irony of that statement struck Virgil forcefully, for the child had been given the dose. She had screamed and had died in about twenty minutes. Virgil picked up the vial and, after examining it carefully by odor, unbelievably he read the label. It was pure carbolic acid.

Dr. Isabelle Cobb, sister of Sam, was the first woman doctor in the Territory. She was a remarkable woman and became a friend and helpful colleague of Virgil. The great-grandparents of that generation of the Cobb family came from the East Tennessee band of Cherokees over the shameful "Trail of Tears" in 1838. Isabelle had all of the qualities of a courageous and intelligent pioneer woman, plus an insatiable hunger for learning. It took all of those to fulfill her ambition of becoming a female doctor (as she was referred to in those days). She was graduated from Woman's Medical College in Philadelphia and returned to Indian Territory, a dedicated physician to her people. In reality all people were her people.

"Doctor Belle," as she was called with deep affection, and Virgil formed the habit of calling each other in consultation on difficult cases and an amusing incident happened involving a tenant living on her farm. It was at butchering time when the first frosts brought out the scalding pots and all hands pitched in to prepare the winter hams, bacon, chittlin's, lard, and all the other products of the big fat hogs that made winter eating the finest in the country. On a cold fall night Doctor Belle was sent for by the wife of a worker who had helped the day before in the smokehouse making sausage. When she arrived, she found the large fellow in intense agony from abdominal pains. His wife admitted that her husband could not resist the

tantalizing smell of the newly mixed sausage and had eaten an enormous amount *raw*!

It had been twenty-four hours since the raw sausage feast and he was vomiting and almost in collapse. Doctor Belle administered a hypodermic of morphine but when the morphine died out, the symptoms returned. Fearing surgery might be required, she sent for Virgil. The two now detected a large mass in the abdomen, and using the timeless methods of clearing out the intestines, sat back hoping nature would take care of the situation. However, next day the poor man was in an alarming state. They prepared him in the little cabin home and Doctor Belle administered the anesthetic. On opening the abdomen Virgil found what he assumed to be the sausage lodged at the junction of the large and small intestines. He hesitated a moment, then with a twinkle in his eye he looked inquiringly at Doctor Belle and she smiled and nodded. He simply squeezed the mass through the bottleneck without opening the intestine — and the reformed raw-sausage-eater recovered in a few days.⁶

Virgil always said men trusted each other in those days, but on the other hand he sometimes told tales that might question the point. For instance, one of Virgil's patients was Bill Dalton, the outlaw of the infamous Dalton gang; bank robbers, train robbers, and sometime murderers. Bill came to him for treatment of malarial fever chills, and always paid his bills promptly. At that time Bill held a US Marshal's commission, as did many of the other bandits of that period. They were cunning enough to gain the authority to arrest whomsoever they pleased in the name of Uncle Sam's law, while robbing trains and banks on the side. Their *modus operandi* was a handy method of disposing of their enemies also. It looked good to be hunting diligently for themselves.

Then there were the Chaney boys, Al and Frank, thought at the time to be reputable citizens. They made a deal with Virgil to put up hay for his horses in exchange for medical services. Not long afterward, however, Virgil had to make other arrangements. After the Post Office at Inola was robbed and the Katy train held up below McAlester, Al went to the penitentiary and Frank was killed while resisting arrest.

Sometimes Virgil was called on a "secret mission," and no matter what a physician's

impulses might be, the desperate characters had the whip hand. Being sent for and finding himself in a gang hideout, any hesitancy he might show soon left at the point of a gun. One such instance came one night when a man arrived with a note scrawled in a barely legible hand asking that he attend a "hurt" man several miles out. There really was nothing unusual about the request, and Virgil set out behind his guide through the cold, biting wind. When they arrived at a deserted shack he was met by a surly-looking group of men with guns. He realized that there would be no introductions. Lying on a few quilts was a rough-looking man of about thirty years who was very sick. He had a three-day-old bullet wound completely through his body. Surrounded by the silent group, Virgil dressed the wound, received a small fee and rode home never to see the man again. He felt that the chances for the patient's survival were slim for he had been neglected too long.

September 15th, 1892, a baby boy was born to Emma Kate and Virgil, Karl Palmer — the Palmer was for a favorite medical professor in Chicago. Virgil's surgical skills became so much in demand that there were two saddlebags now. One was left home for Emma Kate's careful sterilization of its contents and the other was carried on calls. It was often necessary for Virgil to be gone far into the country, sometimes having to stay the night. But from the first, Emma Kate showed herself to be equal to the perils of frontier living. Afraid sometimes, she never complained. When the still of the night was broken by pounding of horses hooves accented by pistol shots, or the distant howl of coyotes, she would rise and take her baby in her arms and sing a soft lullaby as she rocked him. Somehow the feel of her baby in her arms and the sound of her own voice reassured her and she was no longer afraid.

One day in August a messenger rode in from a railroad camp site eighteen miles out on Grand River saying the doctor was needed badly to see a man with "cramps." On arrival, he found a typical Irish "tie hacker" lying on a pallet under a tree. He was in intense agony from what was soon discovered to be strangulated hernia. If the condition is not tampered with the doctor can often relieve it without surgery. However, the poor man had had such rough handling from his fellow workmen in their attempt to "push the hernia back," that it was impossible to reduce without surgery.

First, Virgil sent to Wagoner for Sam Cobb and some chloroform. Then he set about improvising an "operating room." There was no house closer than several miles and time was of the essence. He found an old greasy tin dishpan, the only vessel at the location, and placed it on an open fire to burn the dirt and grease off. He then boiled his instruments in the pan. The patient was ready when Sam drove up. Under Virgil's direction, Sam administered the chloroform to the naked man lying on a sheet spread on the ground. He then cleaned the abdomen with soap and hot bichloride solution, got down on his knees, opened the abdomen over the hernia, reduced it and closed the wound. There was no choice but to leave the patient there in the care of his fellow workmen. Virgil saw the man twice afterward. There were no complications and the restored laborer was soon back swinging the mallet on ties along with the best of them.

For Virgil, this particular operation came in pairs. He had to do the same procedure on a hot night, by coal-oil lantern-light, under the shed outside a dirty log hut filled with children and dogs. While operating, he noticed that something kept falling into the wound. On investigation he found that worm dust was falling from the shed roof into the wound. He simply sponged the worm dust out of the wound with dry gauze. There was perfect healing within a reasonable time.

It was experiences like these that necessitated carrying all sorts of strange equipment — like sheets! Soon "Dr Berry's sheets" became quite famous. The townspeople joked about them, saying that the country folk were not sick, they just needed new sheets. Along with varied types of instruments, drugs, scalpel, dressing, etc, Virgil began carrying sterilized unbleached muslin sheets. They had many uses. For instance, many times in order to prevent such hazards as the above-mentioned worm dust, he would tack them to the ceiling and walls of cabins where he was forced to operate. It was as near as he could get to supposedly-sanitary hospital conditions.

Soon he needed larger containers than his saddlebags. He acquired a rawhide case that was carried when he used the buggy which was becoming more practical as some improvements were made on the trails and roads. Of

course surgical dressings, as later became available, were unheard of. Virgil and Emma Kate prepared them as follows: He ordered a bolt of thin, unbleached gauze and boiled the material in a solution of bicarbonate of soda in a washboiler reserved for that purpose; then he boiled the soda out and re-sterilized bundles of his hand-folded dressings. He also prepared his own iodoform gauze, then in vogue. He kept his good-sized case always packed, ready to take with him when a call came from the country.

A few sophisticated trappings began trickling into the Territory and Virgil read the medical equipment catalogues avidly. Rubber gloves, for instance, were advertised and Virgil sent for some immediately. Later, he told how his announcement and description of them met with polite scepticism at the next medical meeting. They would "cut down on the accurate technique in the use of fingers," they would "be awkward," the doctors insisted.

For some unknown reason, the dregs of humanity often found their way to that new country. Perhaps they thought some magic in the new country would turn their failures into success. It was always amazing to Virgil, who understood the drudgery of farming, to find uneducated and illiterate families this side of starvation. It was for this reason that he wrote a small pamphlet with simple recipes for the sick along with rudimentary instructions in cleanliness and care of the ill. He carried the pamphlet with him as standard equipment on country calls.

Town calls were becoming comparatively routine. Wagoner was flourishing and obstetrical cases robbed him of his sleep with monotonous regularity. But the long trips through the woods never bored him. Game was plentiful, and he hunted when he could find time. Deer often scampered across his path, and he loved to watch the many small animals such as rabbits and squirrels that still roamed the forests.

He listened for the raucous gobble of wild turkey and the high whistle of prairie chickens. If he ever envied city doctors it was not for the comforts they enjoyed, rather it was for the facilities they had at their fingertips for better patient care. Sometimes it seemed that there was a crisis every day that called for hospital care for both the patient's and the doctor's sake.

Such a crisis occurred one day which called upon all the ability and resourcefulness of Virgil's schooling and experience combined. He

was summoned into the country to aid in a difficult obstetrical case. The messenger who came for him said that the young woman, a settler's wife, had been in labor two days already. "Two doctors are with her," the boy said, "but they can't do nothin' for her. They say hurry, Doc." Packing a small portable sterilizer with his usual surgical kit, Virgil made all possible haste — and he arrived none too soon. The young mother was in a condition nearing death unless promptly relieved. He saw that she was still only a girl, really, but already the mother of two. It was immediately evident that the only answer was a caesarean operation; that is, if she could withstand it. It was a desperate chance but he could not stand by and watch her die.

The cabin had two rooms, both with dirt floors. Flies swarmed everywhere for there were no screens. He set to work on the room that served as kitchen. While the two doctors and the frantic husband mopped the walls and ceiling, he scrubbed and prepared the kitchen table and had two sterilized sheets tacked above it. For the first time, he used newly-bought rubber sheeting, covering the table first with the sheeting and then with sterile towels. He was ready.

With the help of the others he moved the woman to the table and sponged her exhausted body with soap and alcohol. One doctor administered the anesthetic, while the other kept the flies away with a peach tree limb. Donning his new rubber gloves Virgil's hands moved swiftly and the minutes ticked away in the tense stillness — and it was over. The baby was dead, but the mother's heart still beat weakly. Throughout the night the three doctors stayed by her side spelling each other — their hands hardly leaving her pulse. Miraculously, she lived, and after a long convalescence, carried on for her family in the wilderness, but there were no more children as long as Virgil practiced in the neighborhood.

By the spring of 1894, Virgil knew that he must have more surgical training. But how could he possibly manage with a young child and another on the way? His assets had grown considerably, but would his savings stretch over a year? He had decided on Beaumont Medical College which later became St Louis University Medical School. The school was gaining a favorable reputation, and by more than coincidence Robert had decided to spend that year in postgraduate work there. It was the good

Robert who helped make the decision. He made a hurried scouting trip and found a tiny flat for Virgil and his family in the building where he planned to live. It was a cold water walk-up, but other medical students lived in the building and would help. The final deciding factor was that Robert promised to assist with the delivery of the new baby due in January.

It had been a very hard decision to make, for by now Virgil had made a solid place for himself in the community. Also, the tribal councils were establishing Medical Boards to license and regulate the medical profession in the Territory. The 1893 codification of the laws of the Muskogee (Creek) Nation specified that the Principal Chief appoint a board of physicians composed of three graduates of reputable colleges. In the spring, the *Wagoner Record* carried the following item:

Dr. Virgil Berry went to Muscogee, Wednesday [May 16, 1894], to attend the meeting of the Medical Board. Dr. Callahan of Muscogee, is president of the board, under its new organization, and Dr. Berry, secretary.⁷

There was one last event that helped open the way to St Louis that autumn, the payment of Headrights to the Cherokees. (Wagoner, though in the Creek Nation was close to the Cherokee border.) This payment was made to the Indians by the government for land taken from them in the east. Around five million dollars in cash was distributed, most of it at Tahlequah, capital of the Cherokee Nation. It was an occasion when the honest gathered to collect debts long due. It was also the grand rally for every shark, mountebank, gambler, shyster, and skin-game artist in the Nation and surrounding States.

Virgil realized that unless he was on the scene at the time of payment he would never collect several fees due him. He reached Tahlequah early the day of payment and stood aghast at what he saw. Already rascals of every description were "collecting" money allegedly due them. Whiskey flowed freely, of course, strictly against the law. Many Indians, helpless under its influence, were being painlessly relieved of their money. Since Virgil was well known, he quickly collected debts owed him with no difficulty, then sick with disgust and pity for the Indians he left for home. The orgy had already grown out of the hands of the few marshals on guard.

But his part in the payment was not over. About midnight after his return home, a messenger rode to his door and "halloo-ed." On

opening the door Virgil saw a boy on a lathered horse who reported that the government paymaster had undertaken to transfer the share of the Headrights to be paid at Vinita, by wagon, escorted by several United States marshals and a few Indian police. At Fourteen Mile Creek a band of outlaws led by the notorious Cook gang had swept down upon them only to be beaten off by the hot fire and brave defense of the officers. However, one of the Indian police was wounded in the crossfire and needed a doctor badly. Quickly dressing, Virgil threw one of his old saddlebags over Fox's (successor to Noodles) strong frame and galloped away behind the messenger. Grand River was up and there was no choice but to use his old trick of swimming at a crossing about a hundred yards wide, hanging on to Fox's tail with saddlebags tied to the saddlehorn. Fox proved to be as good as Noodles at pulling off this performance.

They reached Fourteen Mile Creek only to find that one Indian policeman had died of his wounds. However, Virgil's trip was not in vain, for another officer had been badly hurt. The second officer had been given little attention since his wounds were thought to be minor. By lantern light, the officer's wounds were dressed. The excited group of guards stood about, expecting another attempt to steal the yet untouched bullion. At last, the paymasters and their guards placed the living and the dead heroes in the wagon with the money and the frightened procession reached Vinita without further mishap. It was later learned that one of the bandits had been killed.

The fall of 1894 found the Berrys in St Louis crowded into the flat, but surrounded by eager medical students all trying to outdo the other in helping Emma Kate and little Karl. In her turn, Emma Kate cooked special goodies for them and mothered them as best she could until time came for her to be delivered.

Homer Mulhall Berry was born January 6th, 1895, right in the middle of mid-term exams. The faithful Robert dropped everything and kept his word and did all in his power to make it easy for Emma Kate. She got along fine, but baby Homer made a complete nuisance of himself by having colic for three solid months which all the medical talent surrounding him seemed unable to control. Homer was a very unpopular young man for his lungs were strong and the walls of the flat were thin. Med-

ical courses even then required a great deal of concentrated study.

When spring came, the sad parting with Robert and the other classmates was eased considerably by the thrill of going home to Wagoner. Home! Away from the dirty city. Back to the beauty and cleanliness and comfort of their own little house which had been rented to acquaintances during their absence. They eagerly renewed old friendships, showed off the now angelic new baby, and met all the new citizens that had moved to Wagoner during the winter. Sam Cobb had married a charming little Kansas beauty named Carrie, and the four of them became fast friends. Many evenings were spent around the Cobbs' fine new Ivers and Pond upright piano. They were "family" there in the wilderness, and their friendship lasted all their lives. Besides, Sam and Carrie generously furnished Virgil with six obstetrical cases.

Virgil's surgical talents enhanced by his recent training were much in demand. Patients came into town more often now to the brand new office that had been proudly furnished from Uncle Jimmy Patterson's Mercantile Store in Muskogee. Furnishings consisted of half a dozen straight-backed chairs and a table with a coal oil lamp in the waiting room, and a spanking clean adjustable examination table, two chairs, a roll top desk and perhaps a hundred dollars worth of instruments in a clean glass-front wall cabinet in the doctor's office. Emma Kate made frilly curtains for the windows which Virgil considered unsanitary, but which she insisted relieved the stark utilitarian atmosphere of the place. "After all," she said, "a doctor's office does not *have* to be ugly." She was that far ahead of her time.

Their first great sorrow came that autumn. They were corresponding with Robert, making plans for a reunion in their home at Christmas time, planning parties and feasts of wild game for their visitor, when word came from his family that he had contracted typhoid fever from a patient and had died. They were inconsolable. Not only had they lost their most cherished friend, but the medical profession lost a brilliant young doctor with great potential for future contributions. □

References will follow the final installment of this article.

Installment III "The Seminole Country" will appear in the next issue of *The Journal*.

Bacterial Meningitis Summary 1977

In 1977, The Epidemiology Program began a bacterial meningitis study as part of a national study conducted by the Center for Disease Control. Hospital epidemiologists in Tulsa and Oklahoma City were asked to report cases of bacterial meningitis seen in their respective facilities. Cases reported through the routine communicable disease reporting system were also included in the study.

In all, 161 cases of bacterial meningitis were reported in 1977. *Haemophilus influenzae* meningitis was the most frequently reported type, accounting for 62.7% of all cases. Ninety percent of these cases occurred in children less than 2 years of age.

Of the cases of *H. influenzae* meningitis for which outcome could be determined, the case-fatality rate was 4.3% as compared to 9% reported by CDC from the national data. The rate of ampicillin resistant *H. influenzae* organisms in our study was 19.8% ($\frac{18}{91}$). This is consistent with the 20% rate reported by CDC. *From this information we continue to recommend treatment of suspected H. influenzae meningitis with ampicillin and chloramphenicol until susceptibilities can be deter-*



News From
The Oklahoma State
Department of
Health

mined. A gram stain of CSF is essential in facilitating this decision.

We detected no secondary spread of *H. influenzae* meningitis within the households of cases. CDC's data revealed an attack rate of 6 per 1000 household contacts less than 6 years of age. (The secondary attack rate for meningococcal disease is 4 per 1000 household contacts of all ages.) An attack rate of 49 per 1000 household contacts less than 2 years old was recently reported from another study. Until safe, effective prophylactic measures are available, any illness in the month following household contacts to a case of *H. influenzae* meningitis should be fully evaluated and appropriately treated.

Twelve cases of meningococcal disease were reported in 1977. It should be noted that 83.3% of the organisms serotyped ($\frac{5}{6}$) were due to serogroup A and C, the two groups for which the meningococcal vaccine is effective. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR AUGUST, 1978

DISEASE	AUGUST 1978	AUGUST 1977	JULY 1978	Total To Date	
				1978	1977
Amebiasis	1	—	4	23	14
Brucellosis	—	1	1	3	3
Chickenpox	—	3	—	—	915
Encephalitis, Infectious	2	1	2	17	11
Gonorrhea (Use Form ODH-228)	1253	1222	1256	9021	8515
Hepatitis, A, B, Unspecified	51	47	51	469	505
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	—	—	—	16	10
Meningitis, Aseptic	6	7	8	39	29
Mumps	—	13	—	—	472
Rabies in Animals	7	8	11	136	187
Rheumatic Fever	—	—	—	—	2
Rocky Mountain Spotted Fever	10	9	15	46	61
Rubella	—	—	—	11	29
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	—	1	1	12	55
Salmonellosis	45	34	33	193	163
Shigellosis	36	6	30	205	31
Syphilis, Infectious (Use Form ODH-228)	11	7	12	75	57
Tetanus	1	—	—	3	—
Tuberculosis, New Active	22	20	40	236	213
Tularemia	—	1	—	3	8
Typhoid Fever	—	—	—	2	1
Whooping Cough	2	2	—	11	7

SITE OF THE OSMA ANNUAL MEETING



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MAY 3 - 5, 1979

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(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression, changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride) One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

B-3921 (Y587A)

OSMA Officers Address Cost Question

"The cost of medical care has increased markedly since the mid-1960's. But the surge in medical care costs corresponds quite significantly with the coming of government medical programs and more and more government regulations."

OSMA President Dr Marvin K. Margo made this comment recently at a speaking engagement before OSMA members.

Margo said the rising cost of medical care was one of the most worrisome events facing our society, but he also said government politicians are being less than honest when they attribute these rising costs to hospitals and doctors.

"Let's face it. When you take into account Medicare recipients, Medicaid recipients, enrollees in the Indian Health Services and Armed Forces personnel and their dependents, nearly one-half the people in this country are covered by insurance programs administered and sponsored by the Federal Government."

Margo said, however, that there are good signs on the horizon. First of all he pointed to the Oklahoma Utilization Review System as an effective cost containment program. He said that the OURS program, an alternative approach to PSRO, was designed by Oklahoma doctors and hospitals, and that during the first twelve months of operation it saved up to \$15.1 million.

If you play a little game with numbers, said Margo, and if you consider that only one percent of the population lives in Oklahoma and that 50 percent of our people are covered with Medicare and Medicaid, by projecting this nationwide, you come up with a possible savings of \$30 billion a year.

Margo also pointed to the Oklahoma Voluntary Effort which is part of the nationwide program designed to hold down increases in medical care costs. He said this program is being sponsored by the American Medical Association, the American Hospital Association and the Federation of American Hospitals, and thus far it has been very successful.

In Oklahoma, said Margo, during the first five months of this year the rate of increase in cost per patient day was 6.4 percentage points lower than it was for the same period in 1977. The rate of increase in inpatient gross revenue per patient day over the first five months of 1978, said Margo, is 4.7 percentage points

below the same period in 1977. Margo said this didn't mean hospital costs weren't rising, but he did say that they were rising at a slower rate than before.

The Oklahoma City orthopedic surgeon also pointed out that much is being done in other areas to solve problems which have been identified in the health care area. For example, said Margo, since 1963 the number of physicians in this country has increased 35 percent. He said since 1966, 28 new medical schools have been built, bringing the total to 116.

Margo also pointed out that much had been done in Oklahoma to solve health manpower problems. He said a few years ago Oklahoma was an MD-exporting state, graduating 136 doctors from the medical school with only 85 first-year residency positions. This, he said, meant that 51 qualified physicians left our state every year because we did not have adequate training facilities.

Now, said Margo, we graduate 210 doctors from MD and osteopathic schools in Oklahoma, and we have 210 first-year residency positions. Our satellite training programs and rural medical scholarship programs are helping to take these new doctors out into the rural areas of Oklahoma where physicians are needed.

Margo said that according to an OSMA-sponsored study, only about 9,600 Oklahomans live more than 15 miles or 20 minutes away from primary health care. This figure, he said, represents only 0.3 of 1 percent of the state's population.

Meanwhile OSMA President-Elect, Dr William M. Leebron, was praising the Oklahoma Utilization Review System and Voluntary Cost Efforts before the Blue Cross-Blue Shield Board. At its October 22 meeting, Dr Leebron told the Blue Cross-Blue Shield Board that OURS had "proved that hospitals and doctors working together can reduce hospital utilization. The unnecessary use of expensive tests has decreased. We have found that a judicious review of our own activities results in savings for our patients without a reduction in quality of care. Our prudence also enhances our public image."

Leebron pointed out that the OURS program had received national attention, and that rep-

representatives of the House Ways and Means Committee, the General Accounting Office, and other state PSRO's had been to Oklahoma to study the program. But Dr Leebron also asked two very pertinent questions.

Can we contain costs to the point that we have to close some of our hospitals?

Do you necessarily save money by not buying expensive diagnostic equipment?

Leebron said that doctors and hospitals together can and should contain costs but that they must do it wisely and with the patient in mind.

"Some of us had an opportunity to visit England last year and saw first hand what happens when the purchase of equipment and facilities is delayed. We do not want that problem in this country."

Leebron also said that MD's as a profession and as individuals must encourage and exercise restraint. He pointed out that AMA President Dr Tom Nesbitt had asked physicians to cut the rate of increase in their fees by one percent each year for the next two years.

"While individual physician charges have been a 'taboo' subject for legal and personal reasons, I think it is entirely appropriate to ask our colleagues to 'walk the full mile' in the voluntary effort by holding the line on fee adjustments."

Leebron also pointed out that while physicians' fees from 1974-1977 had risen at a greater rate than the Consumer Price Index, these increases came after discriminatory controls had been placed on medicine by the federal government.

"A historical review of the CPI indicates that physicians' fees have risen generally slightly less than the rate of inflation. They have shown dramatic changes only following oppressive government intervention."

That is one reason, said Leebron, that we should all support the voluntary effort. What

we are talking about, he said, is the preservation of the free enterprise industry.

"It is our way of life. A government-run, nationalized program will be a disaster for our patients as well as for us."

Finally, the Elk City physician called upon government to become a part in efforts to contain health costs by identifying the additional costs incurred by implementation of each new regulation and government edicts for "peer review" committees. He said many of the price increases now of concern are the direct result of federal regulations. He called for the government to be cost effective in the same respect they want medicine to be cost effective. □

AMA Winter Scientific Meeting To Be Held December 7-10 in Las Vegas

The 32nd winter scientific meeting of the American Medical Association will be held December 7-10 in Las Vegas, at Las Vegas Convention Center.

The meeting is held each winter to provide American physicians with a broad-based learning experience in new developments in medical care.

In addition to more than 50 continuing education courses in all aspects of medical care, there will be state-of-the-arts lectures in selected medical areas, other lectureships, teaching luncheons, scientific exhibits, video-clinics, motion pictures, telecourses and teaching by videodisc.

Scientific program for the meeting is published in the October 13 *Journal of the American Medical Association*.

National medical societies will for the first time provide programs under their own sponsorship as a part of the winter meeting. Specialty programs will be provided by the American College of Chest Physicians, American College of Physicians, American Society for Clinical Pharmacology and Therapeutics, and the Section Council on Plastic and Reconstructive Surgery. □

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Please note:

All prices are based on those in effect August, 1978, and on group fares with a minimum of 50 passengers on the Oklahoma City-London portion and minimum of 40 passengers on the London-Amsterdam portion; and are subject to change.

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Attention: **JEANETTE SAUNDERS**

Position on Physician Extenders Studied

In response to a request by the OSMA Board of Trustees, the Council on Medical Services has undertaken a study of the use of physician extenders in Oklahoma. The Council, chaired by Dr Tony Puckett, Oklahoma City, was expected to formally present its findings at the October 29 meeting of the Board of Trustees.

The issue evolves from a proposed nurse practitioner's satellite clinic which is scheduled to be opened in Billings, Oklahoma. At the August meeting of the Board of Trustees this clinic was reviewed, as was the issue of physician extenders. The Board eventually voted to oppose "the proliferation of independent allied health practitioners" and to refer the matter to the Council on Medical Services for additional study. The position statement adopted by the Council and the action taken by the Board of Trustees will be reported in next month's *Journal*.

In other action the Council on Medical Services also endorsed a series of socioeconomic seminars being conducted by Ed Kelsay, Executive Director of the Oklahoma Foundation for Peer Review. Kelsay, a former OSMA employee, has conducted socioeconomic courses for physicians for several years, and the Council recommended that courses such as these be conducted under the sponsorship of the OSMA.

In other action the Council:

- Voted to initiate the formation of a new health organization made up of the presidents of the various professional health associations.

- Reviewed but declined any action on a request that the OSMA endorse the services of an out-of-state collection firm. This firm has already been endorsed by four state medical associations. The Council on Medical Services is expected to review this matter further and to make a formal recommendation at a later date.

- Received a report on physician placement activities in the state. Council members were told that there is no authorized physician placement service in Oklahoma and that no funds for physician placement have been allocated by the Oklahoma legislature for 1978-79. Although it performs little or no recruitment *per se*, the Council on Health Careers handles any inquiries from out-of-state physicians.

- Reviewed health planning activities in Oklahoma and instructed OSMA staff to work closely with the Council on Governmental Ac-

tivities in monitoring federal programs which could affect Oklahoma's health care delivery system. The Council further recommended that a full-time staff person be assigned to monitor government programs such as this.

Three other OSMA Councils met in September or early August, taking the following action.

COUNCIL ON MEDICAL EDUCATION

The main activity of the Council on Medical Education continued to be the Continuing Medical Education program for OSMA members. The Council reviewed a number of exemption requests from OSMA members and prepared recommendations for the Board of Trustees. There are no standard exemptions from the CME requirement, and each exemption request must be reviewed individually. The recommendation from the Council on Medical Education is then forwarded to the Board of Trustees, who has final authority.

Three exemption requests were reviewed at the September meeting.

In further action the Council on Medical Education also:

- Voted to recommend to the Board of Trustees that the OSMA provide the University of Oklahoma Health Sciences Center pertinent CME data and enter into a contract agreement with the OUHSC for a pilot record-keeping program which would begin January 1, 1979, and continue for six months. The purpose of the program would be to enter CME information on the OUHSC computer, thus easing and making more efficient the CME record-keeping system.

- Reviewed a survey application from the Medical Products Systems, Inc. of Bartlesville. This unique CME system incorporates telephone tapes and slides to take CME courses to a number of Northeastern communities which cooperate in the network. Due to its unique approach to CME, it has been difficult to set up a survey of the organization. The Council voted to contact the Liaison Committee on Continuing Medical Education and ask that they set up a survey date. The Council was also informed that St. Francis Hospital of Tulsa had requested to be surveyed on November 6. Hospitals and institutions which are surveyed and approved can then sponsor Category I CME courses without the co-sponsorship of the University of Oklahoma College of Medicine or other similar organizations.

(Continued on Page 444)

Oklahoma State Medical Association

AFRICAN ADVENTURE

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A Non-Regimented INTRAV Deluxe Adventure

(Continued from Page 442)

COUNCIL ON PROFESSIONAL AND PUBLIC RELATIONS

The Council on Professional and Public Relations received a report that over \$100,000 in complimentary air time had been donated by the nine commercial television stations in the state through the OSMA public service program. The Council was also told that medical societies from Missouri and North Carolina had purchased rights to the OSMA-produced PSA's and that the Washington, DC Society appeared very interested. The Council voted to continue this program which has received national acclaim and to expand it by producing a number of 20-second spots. In other business the Council also:

- Voted to produce a patient brochure on second opinions.
- Voted to reprint the OSMA membership brochure . . . "A Proud Heritage" and to accelerate membership recruitment efforts. The OSMA is only a few physicians short of the 3,000 mark which qualifies a state society for a fourth delegate to the American Medical Association.
- Voted to presents awards of merit to each of the television stations which has participated in the OSMA public service program.

COUNCIL ON PUBLIC AND MENTAL HEALTH

The statewide CPR training program which was adopted by the Council on Public and Mental Health and the American Heart Association, Oklahoma Affiliate, was the chief topic discussed at the October 4 meeting of the Council on Public and Mental Health. Although over 25 county medical societies agreed to participate in this program, through October only one such course had been held. The Council voted to contact each county society president once again and encourage them to work with heart association volunteers in setting up courses in their area. The Council also encouraged county societies to contact service organizations, the Fire Department, the Police Department or any similar group as an additional co-sponsor if this support is needed.

In other action the Council also:

- Reviewed a physical examination form currently being used by the Oklahoma State School Activities Association. Council members felt that the form was too long and too

complicated, and suggested a revised, shortened version. These suggestions will now be forwarded to the School Activities Association.

- Received a report from the Committee on Maternal Mortality.

- Received a report from the Committee on Environmental Quality. This committee, which was formed two years ago, is responsible for studying environmental health questions and for formulating or suggesting OSMA policy on these matters. Other councils, committees and OSMA members are encouraged to contact committee chairman, Dr LeRoy Carpenter, if you need the services of this committee. □

Medical Examiner Cases Explained

From time to time there seems to be some confusion as to which deaths come under the purview of the medical examiner. According to the office of the Chief Medical Examiner, the law is specific and requires that this office be notified of deaths in the following categories:

- *By violence.
- *By suspicious, unusual or unnatural means.
- *After unexplained coma.
- *Unattended by a licensed medical or osteopathic physician.
- *Medically unexpected and occurring in the course of therapeutic procedure.
- *While in penal incarceration.
- *Related to disease which might constitute a threat to the public health.
- *Body to be cremated, buried at sea, transported out of the state or made unavailable for further pathological study.

Any accident, suicide or homicide resulting from physical, mechanical, chemical, electrical formal exposure or related means which results in death must be investigated by the medical examiner regardless of the period of survival following the injury. Non-violent deaths within 24 hours after hospital admission are not necessarily a medical examiner case. Patients dying shortly after entering the emergency room are not necessarily medical examiner cases. If the probable cause of death can be ascertained from the history and physical examination, and if this cause of death can be said to be natural, a medical examiner's investigation is not necessary. In general the medical examiner should be notified if the deceased has not been treated for a fatal or potentially fatal illness within 14 days prior to death. □

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DEATHS

GEORGE H. KIMBALL, MD
1899-1978

A well-known Oklahoma City plastic surgeon, George H. Kimball, MD, died October 11, 1978. Dr Kimball was graduated from the University of Oklahoma College of Medicine in 1926, where he later became clinical professor. Following postgraduate training in New York City, he practiced in Oklahoma City until his retirement in 1976. Certified by the American Board of Plastic Surgery, Dr Kimball was a Fellow of the American College of Surgeons, a member of the Oklahoma Society of Plastic Surgeons, the Southwest Surgical Society and a Life Member of the Oklahoma State Medical Association.

RUTH S. REICHMANN, MD
1897-1978

Ruth S. Reichmann, MD, 81, retired Oklahoma City physician, died September 14, 1978, in Milwaukee, Wisconsin. Born in Rockport, Indiana, Dr Reichmann was graduated from the University of Michigan Medical School in 1925. Her practice was established in Oklahoma City in 1926, where she remained until her retirement in 1970. Dr Reichmann was a Life Member of the OSMA. □



Richard J. Mooney, (1) Administrator, St Anthony Hospital and Chairman of the Voluntary Effort, presents David Bickham, OSMA Executive Director, with plaque of appreciation.

OSMA Cost Containment Effort Recognized

The Oklahoma State Medical Association has been recognized for its efforts in helping to reduce the rate of inflation of health care costs. OSMA Executive Director David Bickham received a plaque from the Voluntary Effort recognizing the efforts of physicians to hold down increasing health care costs.

May data show that the rate of increase in cost per patient day in Oklahoma hospitals in the first five months of 1978 was 6.4 percentage points lower than the rate of increase for the same five months during 1977. The average rate of increase in cost per patient day in Oklahoma for the first five months in 1977 was 17.3 percent.

The Oklahoma Voluntary Effort is part of a nationwide program sponsored by the American Medical Association, the American Hospital Association, and the Federation of American Hospitals. □

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MAY 3 - 5, 1978

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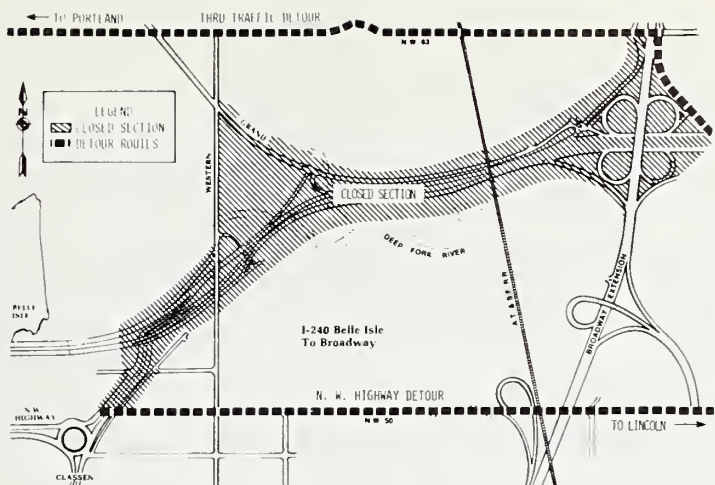
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If you are looking for OSMA headquarters, you may find the going tough. The Northwest Expressway, which runs directly in front of OSMA headquarters, has been closed from the Broadway Extension, approximately one mile east of the headquarters, to the Classen Traffic Circle, approximately two miles west of OSMA headquarters. The Northwest Expressway is under construction, and various parts of the highway are expected to be closed approximately two years. In the meantime, Northwest 63rd and Northwest 50th, which run either side of the Northwest Expressway, are expected to carry most of the traffic. The easiest, least traumatic route to OSMA headquarters, is to take Northwest 63rd, either east or west, depending upon the direction you are coming from, and then to turn south on Shartel. An access road is being built from Shartel to OSMA headquarters. In the meantime, it will be necessary to cross the parking lots of the Oklahoma Dental Association and the Oklahoma Homebuilders Association. □

Wage-Price Controls Denied

Recently there have been many rumors that the imposition of mandatory wage and price controls by the current administration is "imminent." According to the American Medical Association and a spokesman for President Carter, however, these rumors are absolutely untrue. The following denial was made by a spokesman for the Council on Wage and Price Stability to the AMA.

"The administration has neither the intention nor authority to impose wage and price

controls on any sector of the economy, specifically including the medical care sector."

It has been speculated that rumors regarding the wage and price controls were started by those who favor strict controls on the medical community. If this is the case, the purpose of the rumors would be to cause physicians to immediately increase their fees, faced with the threat that the federal government might freeze fees as it did under the wage and price stabilization act of 1971. This would allow critics of the profession to point to this increase as "callous disregard" for the public and national interest by the profession. It would also spell doom for the physician-supported voluntary effort. □

LEGAL BRIEFS

An unborn fetus was not a person within the meaning of the Wrongful Death Act, the Florida Supreme Court ruled.

The mother was taken to a hospital for delivery of her fourth child. The baby's head emerged shortly after she was taken to the delivery room, but the shoulders were too wide to allow further passage. Two other physicians were summoned to assist, but after about 20 minutes of unsuccessful attempts, they noted that fetal heartbeat tones had disappeared. They received the husband's permission and removed the child's head. The rest of the body was removed by cesarean section. The baby weighed 14 pounds, 8 ounces.

Claiming that the physician was negligent in not realizing in advance that a cesarean section was necessary, the child's father filed a wrongful death suit against the physician. A trial court granted summary judgment for the physician on the ground that there could be no wrongful death action for the death of an unborn fetus. An appellate court affirmed, as did the Supreme Court. The child was not born alive, and an unborn viable fetus was not a person within the Wrongful Death Act, the court said.

Three justices dissented, arguing that a jury should determine whether the child was born alive.

—Duncan v. Flynn, 358 So.2d 178 (Fla.Sup.Ct., March 9, 1978) □

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Two Levels of Nursing Urged

The American Nurses Association took action at its recent convention in Honolulu to establish two levels of nursing by 1985 . . . a "professional nurse" with a baccalaureate degree and a "technical nurse" with two years of preparation. Hospital schools of nursing and licensed practical nursing schools would be phased out according to the ANA plan.

This action is expected to generate considerable debate, particularly among those organizations which have traditionally supported diploma programs and LPN schools. Combined, these educational settings have provided a majority of nursing personnel for health institutions in the past, although in recent years the trend has switched toward the baccalaureate and associate degree programs. It is anticipated that both national and state organizations representing health care institutions will be developing position statements on the ANA action in the new future. □

Miscellaneous Advertisements

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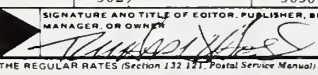
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Mistaken Identity

It's a curious fact that the critics of the medical profession traditionally identify the object of their scorn as "The Health Care Industry." No other profession is referred to — even by its critics — as an "industry." Villification campaigns never identify "The Legal Care Industry," for example, or "The Religious Care Industry," even though they exist for the purpose of providing personal services and are properly classified as professions. Lawyers, ministers and physicians all render personal, private and confidential services. They all function within organizations which include specialized facilities and require community support. As individuals and as professionals they must maintain fiscal solvency, effective administrative structures, adequate executive skills and familiarity with large bodies of constantly-changing data and knowledge. In these respects, at least, the professions are similar. Why is it, then, that only the medical profession suffers derogatory identification as an industry?

Of course, the answer is clear: The federal government views us as an industry, calls us an industry, and deals with us as an industry. In spite of this bureaucratic blunder, however, the health care profession will never and — more to the point — *can* never function as an industry. Personal health services cannot be adapted to assembly-line techniques. A disease in one person is never the identical disease in

another. Treatment procedures which are curative for one patient may be fatal for another. Personal service is always personal and can never be standardized, labelled or dispensed as merchandise.

Still our foolish bureaucracy insists on dealing with the health care profession as an industry. It has decreed that we are an industry and it will forever demand that we become what we can never be. Health care agencies and professionals are not components of an industry. They are not real properties or inventories. They are not statistics or ledgers or balance sheets. They are resources of personal services — vital services which cannot be replaced by computers or vending machines; cannot be regulated by uniform codes; cannot be altered by bureaucratic fiat; cannot be manufactured or packaged or parcelled. Calling a personal service a public utility does not make it so. Calling a profession an industry does not change it.

Irrationally, our president, the members of his cabinet, our congressmen, senators and media spokesmen refuse to acknowledge or accept these immutable facts. They call us an industry so we are one. And they are willing to spend us into bankruptcy in their efforts to make us function as an industry.

It would make more sense for them to insist that the Fourth of July is Christmas.

So — I would like to wish all my colleagues in the medical industry A Very Merry Independence Day and A Happy New Year. *MRJ*

To me few things are sadder than an impaired or troubled physician who has spent most of his life training and studying how to serve his fellowman and who is then prevented from doing so because of problems which have begun to overpower him. They may be as a result of a divorce, a death in the family or simply too much work and too much strain. In any event the doctor's illness prevents him from performing the art he has spent a lifetime learning . . . curing the illnesses of others. Too often, out of neglect or hesitancy to become involved, these matters are left unattended until it's too late and the physician finds himself brought before our Board of Medical Examiners.

But there are alternatives to the severe action which the Board is often required to take. For example, organized within the State Medical Association are both a Physicians Commit-



tee and a Grievance Committee. Likewise, many county medical societies have committees or organizations of physicians whose purpose it is to help our colleagues who are experiencing problems for whatever reason. They can be effective and they can help.

The Physicians Committee, chaired by Dr Robert McLauchlin, and the Grievance Committee, chaired by Dr Lucien Pascussi, stand ready to counsel with physicians and help them with their problems before the Board of Medical Examiners has to become involved. The Physicians Committee is designed to counsel troubled physicians, and the Grievance Committee works with doctors to help solve aberrant practice patterns and other problems they may have. Each has hard-working, caring, compassionate and interested members, and I would urge you to contact them if you know of a physician who needs their help.

Marvin K. Margo M.D.

Antibiotic-Associated or Toxin Mediated Colitis

A Unifying Hypothesis

HANNA A. SAADAH, MD¹
PAUL T. ESAKI, MD²

*Antibiotic-associated colitis may be an
old disease with a new name.*

INTRODUCTION

Diarrhea is a common complication of antibiotic therapy. It is regarded as a benign, self-limited side effect that usually improves when the antibiotic is discontinued. There are three situations, however, that should alert the physician to the possibility that the diarrhea may not be of the benign, self-limited variety:

a) When the diarrhea is grossly bloody or purulent.

- b) When it does not improve within a week after antibiotics are discontinued.
- c) When it first appears after the antibiotics have been discontinued.

If any of the above should occur, the possibility of antibiotic-associated, "toxin mediated" colitis must be considered.¹

HISTORY

A disease called pseudomembranous enterocolitis was first reported by Finney in 1893 as a fatal complication of abdominal surgery.² Several reports followed in the first half of the 20th century describing a "diphtheric" or pseudomembranous enterocolitis in heavy metal poisoning, in uremia, in septicemia, in intestinal ischemia, as a change proximal to obstructing lesions,³ and as a dreaded post-operative complication.⁴⁻⁶ During the second half of the century, the situation was marked by confusing terminology.^{7, 8} With the increasing use of antibiotics, it became evident that pseudomembranous colitis may also occur as a complication of antibiotic therapy independent

From the Departments of Internal Medicine (1) and Family Medicine (2), Mercy Health Center (1) and The University of Oklahoma Health Sciences Center (2), Oklahoma City, Oklahoma.

of surgery or other situations.^{9, 10} As a result, the distinction was made between postoperative and postantibiotic pseudomembranous colitis in spite of the fact that after 1939, antibiotics were used in most surgical patients.⁸ To add to the confusion, several observers cultured *Staphylococcus aureus* from the stools of patients with postoperative and postantibiotic pseudomembranous colitis and blamed this organism for the disease which they renamed "staphylococcal enterocolitis."¹¹⁻¹⁵ Our review of the staphylococcal enterocolitis data indicates that patients with postoperative or postantibiotic pseudomembranous colitis had similar clinical pictures irrespective of the presence of *S. aureus* in the stools.¹² Moreover, the presence of *S. aureus* in the stools of patients who had undergone surgery or who were taking antibiotics was independent of the occurrence of pseudomembranous colitis.¹² Other observers suggested the pathogenesis to arise from toxins elaborated by the organism.^{13, 16-18} Recently several responsible authorities in the field have expressed doubt that staphylococcal enterocolitis represents a true disease entity.⁸ On the other hand, since pseudomembranous colitis is only one of several morphologic forms of colitis that may complicate surgery or antibiotic use,^{7, 9, 17} the general term "colitis" is more appropriate for this purpose. And because it has become likely, in view of recent evidence, that endogenous bacterial toxins may represent a final common pathway for the production of the colitis,¹⁹⁻²¹ we propose that pseudomem-

branous, postoperative, postantibiotic, and staphylococcal enterocolitis may all be different names and manifestations of the same disease which could more appropriately be called "toxin-mediated colitis."

ANTIBIOTIC-ASSOCIATED COLITIS (AAC)

Although no age group is spared, AAC tends to occur more frequently in older women who are seriously ill or debilitated.^{9, 22-24} It may occur following the use of tetracyclines,^{12, 25} penicillins,^{15, 23} cephalosporins,^{26, 27} chloramphenicol,^{10, 15} aminoglycosides,^{12, 15} sulfa drugs,¹⁵ lincomycin^{2, 8} and clindamycin¹; but it has been best studied following clindamycin therapy.^{1, 8, 22-24, 28-37} Rarely, the disease may present with severe ileus in the absence of diarrhea.³⁸ In the majority of patients, however, a nonremitting diarrhea is the most prominent complaint.^{32, 36, 39} Fortunately, if recognized early and the offending antibiotic is discontinued, the diarrhea usually abates.^{1, 35, 39} If, on the other hand, the diarrhea does not abate or occurs after the antibiotic is discontinued, it tends to run a prolonged course associated with significant morbidity.^{1, 25, 27} The spectrum of disease, therefore, includes diarrhea as a common, benign, self-limited complication on one end and colitis, a more serious and occasionally fatal complication on the other.^{3, 8, 9, 28}

The diagnosis of AAC should be suspected in any patient who develops a protracted diarrhea within four weeks following antibiotic therapy.^{28, 32} Abdominal pain, fever, and leukocytosis accompany the diarrhea in most patients.^{1, 28, 32} If the diarrhea is bloody or if the stools contain numerous white blood cells, proctosigmoidoscopy should be performed.^{1, 28, 40} If AAC is present, one of three morphologic appearances may be seen depending on the stage of the disease and which antibiotics were used⁸: a) Mucosal erythema and edema with non-specific inflammatory changes suggest mild or early disease.^{1, 9, 27, 28} b) Mild colitis with microulcerations of the surface epithelium have been seen after ampicillin³⁴ and Cleocin,²⁸ while ulcerative colitis and proctitis have been reported as complications of tetracycline and chloramphenicol therapy.^{25, 41} c) "Classical" pseudomembranous colitis has been well described by several groups^{1, 8-10, 23, 26, 29, 30, 42} as elevated yellowish plaques, 1-6 mm in diameter, scattered over an inflamed mucosa.¹⁰ Pathologically, the

Hanna A. Saadah was born in Lebanon (1946), received his MD degree from the American University of Beirut (1970), did his postgraduate training at the University of Oklahoma then spent two years on the faculty as an assistant professor of medicine. He is board certified in both internal medicine and infectious diseases and is currently in private practice at the Mercy Health Center, Oklahoma City.

Paul T. Esaki, MD, was born in Hawaii in 1950. He received his medical school training at the University of Hawaii graduating in 1976. He came to Oklahoma where he did a rotating internship at the University of Oklahoma Health Sciences Center and is currently in his final year of family medicine residency.

pseudomembrane is composed of a fibrin mesh containing necrotic cells, mononuclear cells, red blood cells, and a predominant infiltrate of polymorphonuclear leukocytes.³⁴ The mucosa may show erythema, edema, superficial necrosis, or deep ulcerations that occasionally extend to the submucosa.³⁴ The site of heaviest involvement is the distal colon with progressive tapering and sparing of the proximal bowel.^{10, 34} This is in contrast to the "non-antibiotic" forms which may involve the whole bowel from stomach to rectum.⁸

The etiology of AAC centers around clostridial toxin(s). Larson first reported a toxin associated with pseudomembranous colitis.⁴³ Several other groups⁴⁴⁻⁴⁶ elaborated on this concept and as a result of their studies^{19-21, 47, 48} strong evidence has accumulated that pseudomembranous colitis is caused by a clostridial toxin. It appears that, under the suppressive effects of certain antibiotics on the colonic flora, resistant clostridia flourish, elaborate toxin(s), and thus produce a cytopathic effect on the colonic mucosa resulting in the development of colitis. Clindamycin given to Syrian hamsters consistently causes colitis.⁴⁸ Cecal contents, or their microfiltrates, from hamsters with colitis induce colitis in other hamsters.⁴⁴ Pure cultures of *Clostridium difficile* and microfiltrates of these cultures produce colitis in hamsters.⁴⁴ Neutralization of cecal or culture filtrates with clostridial antitoxin protects hamsters from colitis.⁴⁴ *C. difficile* was isolated recently from four patients with pseudomembranous colitis and produced a toxin *in vitro* similar to that found in the fecal suspensions of these patients.²⁰ Oral inoculation of hamsters with *C. difficile* isolated from these patients produced a fatal enterocolitis and was reisolated from the cecal contents of the hamsters.²⁰ Also, fecal suspensions from patients with pseudomembranous colitis have induced colitis in hamsters.^{20, 47} Thus, Koch's postulates have been satisfied.

The treatment of AAC is not well established. Most authorities agree that the offending antibiotic(s) should be stopped, fluids and electrolytes replaced, and antimotility agents like atropine-diphenoxylate (Lomotil) avoided.^{39, 49} If, however, such conservative measures fail to control the diarrhea, other therapeutic agents may be utilized. Corticosteroids and cholestyramine are of some benefit but have not been found uniformly effective.³⁴ Three antibiotics active against clostridia have

been tried and found very effective. In 1953, Dearing and Heilman treated several cases of staphylococcal enterocolitis with oral erythromycin, 300-400 mg four times daily, with very good results.¹² In 1966, Khan and Hall treated 45 cases of so-called staphylococcal enterocolitis with oral vancomycin, 500 mg every six hours. The response was excellent and no mortality occurred, while, of the 64 untreated patients there were 11 deaths attributed to the colitis.¹⁵ Recently, vancomycin has been shown to protect hamsters from clindamycin-associated colitis.⁵⁰ Others have reported eleven^{45, 51, 52}; and we have reported three patients⁵³ with antibiotic-associated colitis who responded promptly to oral vancomycin, 500 mg every six hours. Metronidazole (Flagyl), which is active against anaerobic bacteria, has been shown to protect guinea pigs from experimental ulcerative colitis,⁵⁴ and one patient with AAC has been cured with oral metronidazole, 1.5 gm daily.⁵⁵ With the above facts in mind,⁵⁶ it is most interesting to note that, while most antibiotics have been reported to cause AAC, erythromycin, vancomycin, and metronidazole, which have been found therapeutically effective, have never been implicated. □

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Colitis / SAADAH, ESAKI

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Antibiotic-Associated Colitis: Report of a Case



From the Residents' Conference



CASE REPORT

C. I. LONG, DO, Edited by
JERRY B. VANNATTA, MD

A case is reported in which pseudomembranous colitis (PMC) follows the successful treatment of a gram negative peritonitis with intraperitoneal aminoglycoside. The antibiotic-associated colitis is successfully treated with hemodialysis and oral vancomycin.

INTRODUCTION

Antibiotic associated pseudomembranous colitis (PMC) is becoming a commonly recognized entity.^{1, 2} Most reported cases involve the oral, intramuscular, or intravenous routes of administration. The case reported below is one in which an aminoglycoside was administered intraperitoneally. A discussion of its toxic manifestations on the colon and the treatment of this case are included.

This case was presented by Dr Long at Residents' Conference, Veterans Administration Hospital, October 6, 1978.

A 58-year-old male was admitted to the Oklahoma City Veterans Administration Hospital for evaluation of azotemia.

Two months previously, he had noticed an increase in urinary frequency, hesitancy, and a decrease in urinary volume. Two days prior to this admission, he was admitted to another hospital with a four-day history of nausea and vomiting. The referring physician found him to be acidotic and azotemic, with an arterial blood pH of 7.26, blood urea nitrogen of 198 mg%, serum creatinine 25 mgm%, and plasma bicarbonate 16.5 mg%. The leukocyte count was 24,000/mm³ with 84 neutrophils. Urinalysis revealed specific gravity 1.012, pH 6.0, albumin 4+, occult blood 3+, white cells 1-3 per high power field, red cells 25-30 per high power field, and no casts were noted. He was transferred to the Veterans Hospital.

He had a past history of peptic ulcer disease and had undergone a hemorrhoidectomy, herniorrhaphy, and a transurethral prostatectomy. He admitted to alcohol intake of one pint per day for twenty years and a forty pack year history of smoking cigarettes. Except for occasional antacids, he took no medications.

Family and social histories were not pertinent to the present illness. The review of systems was noncontributory.

On examination, he appeared obese and acutely ill. Temperature was 37.2°C, pulse 96 per minute, and respirations 26 per minute. The blood pressure was 160/84 mm Hg. Head, ears, eyes, nose, and throat were unremarkable. The lungs were clear to auscultation. Percussion revealed dullness in the left posterior inferior chest, and the heart sounds were normal. The abdomen was obese. There was tenderness to pressure in the right upper quadrant. The liver span was 12 centimeters. No costovertebral angle tenderness was elicited. The genitalia were normal, and the stool was negative for occult blood. Neurological examination revealed no abnormalities.

The urinary sediment was unchanged from previous specimens except that mixed cellular casts were present. The serum sodium was 130 mEq/l; postassium 6.4 mEq/l; the chloride 86 mEq/l; bicarbonate 16.5 mEq/l. Blood glucose was 126 mg%; serum creatinine 25.5 mg%; blood urea nitrogen 205 mg%; serum phosphorus 16 mg%; uric acid 16 mg%. The hemoglobin was 10 gm% and the hematocrit 26%. The leukocyte count was 10,700. Chest x-ray revealed pulmonary edema and a left lower lobe infiltrate with associated pleural effusion. The electrocardiogram revealed the presence of atrial flutter.

On the night of admission, the patient was treated with intravenous Lasix, kayexalate enemas, and oral sorbitol. The following morning he was transferred to the medical intensive care unit with the diagnosis of acute renal failure and a left lower lobe infiltrate thought to represent either pneumonia or a pulmonary embolus. Interpretation of a lung scan and a pulmonary arteriogram suggested the pres-

ence of a pulmonary embolus. Heparin therapy was instituted.

On the second day of hospitalization, peritoneal dialysis was initiated. Cultures of blood, sputum, pleural fluid and peritoneal dialysate were negative for bacterial growth. On the fifth day of hospitalization, a peritoneal dialysate culture grew *Serratia liquefaciens*. On the tenth day, the peritoneal fluid grew *Serratia marsessans*, and treatment with amikacin was started. Amikacin, 500 mg was given intravenously, and then 50 mg was added to each two liters of dialysate. Intraperitoneal amikacin was continued for 105 passes of dialysis, covering a period of five days.

Amikacin was discontinued on the fourteenth day of hospitalization at which time, the serum amikacin level was 33 µg/ml (therapeutic 10 µg/ml-30 µg/ml). Peritoneal dialysis was discontinued one day later, at which time the peritoneal fluid was sterile. The patient was transferred from the intensive care unit to the general medical ward. The blood urea nitrogen was 35 mg%; serum creatinine 8.3 mg%; serum phosphorus 3.6 mg%; uric acid 6.9 mg%. The serum sodium was 136 mEq/l; potassium 4.1 mEq/l; bicarbonate 32 mEq/l.

A drip-infusion nephrotomogram and 22-hour delayed exposure revealed bilaterally irregular kidneys measuring eleven and twelve centimeters in length. They were both without excretory function. A retrograde pyelogram revealed normal architecture of both kidneys.

On the sixteenth hospital day, the patient experienced generalized cramping abdominal pain and explosive, mucoid, bloody diarrhea. Stool frequency varied between 15 and 20 per day. On the twentieth day a rectosigmoidoscopic examination revealed diffuse areas of yellow plaque-like lesions. Biopsy of these lesions revealed inflammatory infiltration with exudation consistent with pseudomembranous colitis. On the twenty-second day, a repeat serum amikacin level was 9.3 µg/ml. On the twenty-third day, hemodialysis with charcoal perfusion was performed, after which the serum amikacin level was 2.3 µg/ml. Following the first hemodialysis, the stool frequency decreased to three a day, but then began to increase again. Because of the azotemia, daily hemodialysis was continued for several days, followed by intermittent dialysis about three days per week. Based on recent data³⁻⁵ suggest-

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ing an endotoxin-producing clostridia as the organism responsible for PMC, vancomycin therapy was initiated. On the twenty-seventh day, vancomycin, 500 mg was given by mouth every six hours. The vancomycin dose was varied according to the dialysis schedule in order to obtain therapeutic blood levels. Vancomycin was continued for a total of seven days. By the third day of vancomycin therapy, the stool frequency was three per day, and prior to discontinuation of vancomycin the patient was asymptomatic and having normal stools. He was continued on hemodialysis and discharged on the forty-fourth hospital day.

DISCUSSION

Though most antibiotics have been shown to be associated with PMC, we feel that this case is unique for two reasons: (a) The antibiotic

implicated is amikacin. (2) The route of administration was intraperitoneal, with the exception of one intravenous dose.

The clinical response in this case supports the recent data that antibiotic-associated PMC responds to oral vancomycin therapy.⁶⁻⁸ □

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Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD

III. The Seminole Country

MARGARET BERRY BLAIR
with the collaboration of
R. PALMER HOWARD, MD

While a medical student, the youthful Virgil Berry practiced in Chouteau in 1889-90. After graduating from the Chicago Physio-Medical Institute in the spring of 1891, he established his practice in Wagoner. In a few months he and Emma Kate James were married, and she shared fully in the pioneer doctor's responsibilities and trials.

The frontier practitioner sometimes treated Indian police officers after shoot-outs, and at other times was forced to attend outlaws in their hideouts. He repaired the strangulated hernia of a railroad "tiehacker" while kneeling beside his patient on the prairie ground. When operat-

ing in primitive cabins he draped the ceiling and walls with sterilized sheets. With these and other surgical equipment from his saddlebags, he performed life-saving procedures including Cesarian sections.

Ambitious for further training in an AMA-recognized school, he attended a forerunner of the St Louis Medical College during 1894-95. Then he returned to open a better-equipped office in Wagoner.

This installment covers Doctor Berry's experiences as National Physician for the Seminole Nation from 1898 to 1901. He then moved to Wetumka, where his medical practice prospered and he participated actively in the Indian Territory Medical Association.

The years passed swiftly for Virgil, each with its quota of service and growth in experience. All Saint's Hospital had been opened in McAlester, sponsored by the Episcopal Church. Virgil published interesting gynecological case-reports from his practice.⁸ Then during 1897, word came that there was to be a vacancy in the Physician's office for the Seminole Nation of Indians in the south central part of the Territory. Quietly Virgil mulled over the decision of whether to apply for the position. He and Emma Kate loved Wagoner and its wonderful people, but growth had slowed some-

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what, making prospects of establishing a hospital there less propitious.

The promise of an increase in income for his growing family and the challenge of new fields to conquer overcame his reluctance in the end. Tilting the scales finally was the fact that he had been successful in his association with the Indians in the Creek and Cherokee Nations, and now felt that he would like to work with Indians exclusively. And so, he applied for and received the appointment as National Physician to the Seminole Indians. In May of 1898, armed with his appointment signed by the Seminole Chief and President William McKinley, Virgil bade a sad farewell to Wagoner and moved saddlebags and baggage to Wewoka, capital of the Seminole Nation.

There he would have three thousand people under his care, two thousand Indians, approximately, and one thousand negro freedmen. The Seminoles had lived in Georgia and Florida, and were originally of Muskokian stock. The negro freedmen were former slaves owned by the tribe before their removal from the South to Indian Territory. The negroes were freed by the Emancipation Proclamation, and were later given equal rights with the Indians. By the time Virgil went to the Seminole Nation, this truly proud people lived scattered throughout an area of about 25 by 50 miles, between the North and South forks of the Canadian River. This was Virgil's area of practice.

Furnished along with his office and a fair amount of medical equipment was an interpreter named Caesar Bowlegs, a most remarkable man. Caesar had been a slave of the Seminoles and had been educated along with the children of "his family." "His family" must have indeed been leaders in the hierarchy of the tribe, for Caesar was well educated with an added amount of native intelligence. He was very, very black, and he was bilingual. He was getting old by Virgil's time, but his age slowed him down very little.

Caesar had been in the medical office for seventeen years as interpreter and he was acquainted with every inhabitant of the Nation as well as every foot of ground. As Virgil covered his territory, he and Caesar could be seen jogging along in one of the two buggies Virgil now maintained, engaged in animated conversation. From Caesar, Virgil drew out tales concerning the Seminoles and their problems and their code of ethics. Caesar loved to

VIRGIL BERRY, MD

Chronology

III. The Seminole Country

May, 1898—Relocated in Wewoka, as National Physician for the Seminole Nation, I.T.

June 1, 1898—Elected member of Indian Territory Medical Association.

Summer, 1901—Relocated in Wetumka, Creek Nation, in the private practice of surgery and medicine.

June 22, 1905—Elected President of the Indian Territory Medical Association at the annual meeting in Tulsa.

talk about the subject he knew best, for he was as much like the Seminoles as it was possible to be. He often administered an anesthetic and his general medical knowledge picked up over the years was extensive. However, he never presumed to give advice unless it was asked for.

Sometimes the two would be caught at night far from home, with, perhaps, a full day's work ahead. In the summer, they would drive off the road, feed the team, spread some quilts on the ground and lie down to sleep. Usually Virgil slept under the buggy, but Caesar preferred to lie under a tree. It was Caesar who often pulled rations for a light snack from the sack tied over his shoulder, perhaps chittlin' cornbread, or jerkey. If there was time, he sometimes caught quail in a snare and within the hour had them cooked on a spit over a carefully tended fire.

On August 7th, 1899, a little girl, Ruth Katherine, was born to Emma Kate and Virgil, there to grow round and healthy with her two brothers on the open prairie while their young father fought to make inroads on ignorance and disease. He felt great satisfaction from serving these people so greatly in need of enlightened medical care.

He had a free hand — even considerable encouragement from the Seminole Chief, a member of the amazing Brown family that played such an important role in the life of the transplanted tribe. John F. Brown was chief; Jackson, his brother, was treasurer; and a third brother, Stanton, lived on a small farm near Holdenville. (Their sister, Alice, later to become Chief at her brother's death, was admitted to the Oklahoma Hall of Fame many years later in recognition of her fair and just leadership of her people.) They were children of a Scottish-American physician assigned to the

army post at old Ft Gibson and a Seminole woman named Millie Fish. Chief Brown and his family lived in a large, ramshackle house at Sasakwa Mission, where he dispensed hospitality in a lavish manner. When Virgil passed that way he always stopped to call and was invariably given a royal welcome. No matter how many guests had preceded him, a place was found for the tired doctor to stay the night.

Chief Brown was well aware of the importance of the medical work being done for his people and he knew that some of the problems of medical practice over the rambling Nation were impossible of solution in a hurry. Several doctors who preceded Virgil had thrown up their hands and resigned. One frustration was caused by the irresistible impulse of the tribesmen — especially the fullbloods — to be on the move when seriously hurt or ill. Sometimes Virgil would be called to attend an injured brave only to find, after driving 10 or 12 miles, that his patient had moved on, perhaps miles away to the home of a friend or relative. On arriving at the second destination and again finding his patient gone, he was ready to give up in exasperation. He never found a satisfactory explanation of this peculiarity.

Situations that had not been anticipated by the earnest Virgil rose to baffle him. The Seminoles were a mixture of the primitive and the white man's culture. In spite of the extensive educational programs, taught for the most part in mission schools, they still really preferred their Medicine Men. Sometimes this primitive habit proved to be an insurmountable obstacle. If he was called to see a sick person and the Medicine Man had been called also and arrived before Virgil, then he was helpless for the people feared to disobey their holy men. Furthermore, this faith in the old ways was not confined to an ignorant few, but shared by many of the better educated. With patient tact (not one of his natural talents) Virgil was to overcome this obstacle to some extent. He learned to stand quietly by and watch his rival's ministrations, which usually proceeded as follows. The Medicine Man carried with him a kind of decoction, or tea, made of roots and herbs boiled in water. The ingredients were a carefully guarded secret, of course. He set this liquid by the patient in a pot or earthen bowl. Placing the end of a long reed, or sometimes cornstalk, in his mouth, he would dip the other

end into the decoction. After a moment he would place the end that had been in the bowl on the patient and make a wierd, crooning sound, somewhat like the droning of bees. This incantation would last several minutes, and then be repeated at intervals. At the end of the rite, Virgil would step forward. Wording his request with care, ask if he might now help the Medicine Man. With the slow deliberation of their race, they began to trust him. Soon he was seldom refused permission to use the "white man's medicine." A great deal of the credit should be given Caesar Bowlegs, whose persuasive powers were considerable.

Perhaps a year after entering into practice for the Seminoles a strange incident occurred, unique even in the Territory — a never-to-be-forgotten vignette etched into Virgil's memory. One night, in the midst of a windstorm, a rider came asking him to see the little three-year-old daughter of a band chief named Kin-kee-hee, who lived 16 miles from Wewoka. Part of the road leading through the woods was virgin timberland and recent rains had washed deep gullies across the dim trail. Hanging a lantern on either side of the dashboard of the buggy in order to help anticipate obstacles, Virgil set out with Caesar on the slow and tedious journey.

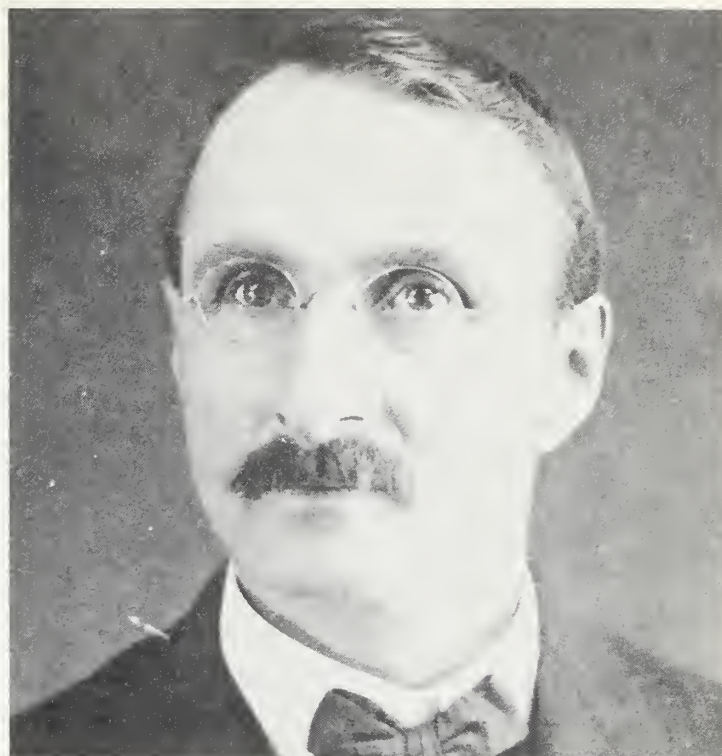
Suddenly, the team fell into a deep washout and became tangled in some roots. Caesar jumped out and quieted the horses, holding on to their bridles. But they were too excited to pull gently and lunged forward only to pull the buggy in the hole after them. By some miracle the buggy was not broken to pieces, and by moving slowly through the wind and darkness, finally, the tired horses and riders approached the little prairie home. They knew instantly that they were too late for a mournful wail came to them on the wind and the wail was for the dead. Once heard it was never forgotten. Alighting from the buggy, Virgil and Caesar consoled the bereft parents as best they could over the loss of their pretty little girl. Then being very tired, Virgil lay on a blanket in front of the fireplace to rest until morning.

At dawn a very distressed Kin-kee-hee came to Virgil as he was preparing to leave for the journey home. Through Caesar, Virgil learned that the father had no money for a coffin. One look at the helpless pleading in the man's eyes and Virgil asked for tools and lumber, and Kin-kee-hee brought some old wood, a hammer, and a dull saw. As he rolled up his sleeves

to fashion a box he hoped would resemble a coffin, Caesar and the father went to the family cemetery nearby to dig the small grave. In about an hour the crude coffin was completed, but as he looked from it to the tiny doll-like body he knew he could not put it in such an ugly resting place. Turning to the watching father, Virgil asked him through Caesar if there was any black cloth in the house. Kin-kee-hee shook his head sadly. Then his face lighted up and motioning for them to wait, he trotted off across the prairie to a neighbor's and was soon back timidly offering about five yards of blue calico sprinkled with tiny sprigs of red flowers — of course, the material was meant for a pretty dress. Virgil nodded approvingly. Quickly, he covered the box both outside and inside, then gently placed the small form inside and looked around at the circle of observers, all of them smiling just a little at how pretty she looked surrounded by the flowered material.

To Virgil's surprise, Caesar now offered him a Bible. Virgil never asked him where it came from, but he could guess that it either came from the abundantly filled sack carried at all times, or that a missionary had left it. The former was more likely, since it was in English. And so it was that the doctor led the procession of relatives and friends that had appeared from nowhere, to a tiny grave where he read aloud a passage or two of comfort, and said the Twenty-third Psalm as the flower-sprigged coffin was lowered into the earth. The soft wail for the dead floated out across the prairie as Virgil helped replace the newly disturbed dirt. It was finished. As they drove silently home Caesar spoke only once. He said, "You made friends today, doctor." And sure enough that incident was one of the wedges to acceptance of Virgil by the Seminoles.

Busy as he was Virgil still made long rides in the eastern part of the territory to attend meetings of the Indian Territory Medical Association — to Muskogee, Wagoner, Vinita and McAlester. That country was his first love. He looked forward eagerly to the renewing of friendships and associating with physicians he admired and whose medical advice and knowledge meant so much to him. At the December 7, 1897 meeting in Muskogee he submitted his 1895 diploma from the Beaumont Medical College, together with the required one dollar initiation fee. Accordingly, his application was approved and Virgil was elected to member-



Virgil Berry, MD

Between 1900-05. This portrait was adapted in *Oklahoma Medical News-J.* 13: 285, 1905.

ship six months later. He first participated as a member of the December 6, 1898 meeting in Wagoner when he contributed to the discussion of a presentation by Doctor G. A. McBride, Ft Gibson, concerning the removal of a breast. On June 2, 1899 in South McAlester the *Minutes* record:

Dr. Berry reported an interesting case of ovarian cyst, and in connection with the report presented pathological specimens which gave rise to considerable instructive discussion.⁹

The *ITMA Minutes* record Virgil's participation frequently at the meetings after 1899, and on June 20, 1900 in Wagoner, he gave his first formal paper. "Trauma of the Head" was included in the program on "Surgery," and it was discussed by Doctors R. I. Bond of Hartshorne, David Gardner of Lehigh, and B. Hatchett of Ft Smith, Arkansas. Perhaps the incident of the fight between the railroad workers several years before, when the jealous lover used his shovel to bash in the other's head, inspired further study and preceded a wider experience of the subject.¹⁰

At the beginning of the new century, sudden disaster swept the Seminole tribe in the form of a smallpox epidemic. Virgil was learning that many contagious diseases which are not so serious to the white man are fatally virulent to Indians. No disease of civilization sat lightly with them. A disease like smallpox could

spread and destroy life like the plagues of old. Only a few Seminoles had been vaccinated in recent years. When Virgil discovered the first few cases of the dread disease and saw how quickly it took its victims, he knew there was no time to lose. He knew that with Caesar's help he must somehow vaccinate the three thousand people under his care. It was impossible, he knew, but he had to try. Virgil had been vaccinated in Wagoner. He now vaccinated Caesar even though he thought the previous doctor probably had vaccinated him. He had to be sure.

After rushing in additional vaccine, the two started out. Emma Kate made two white coverall canvas suits for each of them. She was taking no chances on their being infected. Virgil went along with her on this, even though he rather doubted the value. One suit was soaked in disinfectant, boiled and laundered, while the other was being worn. Furthermore, she made each of them wear white gloves. In this garb, they labored without ceasing, snatching naps in the buggy whenever possible. Night and day they kept going, doggedly moving from settlement to settlement — from home to isolated home — returning to Wewoka only for food and a fresh team of horses and a change of their work-stained white canvas suits. Many times the task seemed hopeless and they were almost ready to give up, because many were still afraid of the white man's medicine. Some of the Indians would hide or run away as they were approached by the white-suited pair—the costumes themselves probably adding to their fear. But with no time to coax or reason, although Caesar did his best, a few were vaccinated by force. However, for the most part they submitted peacefully enough after more came down with the disease. They became more afraid of the sickness than the mysterious scratch on the arm that resulted in a scab and a slight feeling of illness. At last, the mammoth task was as complete as the two could make it. Inadequate tribal rolls made it impossible to check on each member. But as they neared exhaustion they were reasonably confident that few had escaped them.

A fight with the disease itself followed since for many the vaccine had come too late. The Indian's habit of moving and the frequent visiting between families and friends undoubtedly helped spread the disease to those who were

vulnerable. In some places, it made alarming inroads and in spite of their efforts whole families were wiped out. In a few instances, it was impossible to have a proper burial and their small huts were burned over the bodies. Just when it seemed that nothing could be done to stop sporadic outbreaks here and there over the Nation, the epidemic suddenly subsided. It is not known how many died during the epidemic, for only scanty records were kept, but it is certain that the number would have been much greater if it had not been for the doctor and the old intelligent negro.

One day Jackson Brown, treasurer of the tribe and brother of Chief John F., sent for Virgil saying that their brother Stanton had become involved in a fracas and had been stabbed, and asking him to attend him in nearby Holdenville. On arriving at the scene of the fight, he found Stanton lying on a pine table spread with a quilt and with almost all of his intestines lying outside his body. The gash cut across his abdomen was five or six inches long and a great deal of blood had been lost. After a careful examination, Virgil could find no cut in the intestine, so, taking a chance, he washed them in a warm salt solution, returned them to their proper housing and sewed the wound up. Much to the doctor's surprise, the hardy Stanton was up and going again before long and lived to a ripe old age.

Even though Chief Brown ruled his people with dictatorial zeal, he consulted the legislative body composed of men elected by the tribe. There were two levels of members in the council. The Band Chiefs had much greater influence than the common council members, and they acted as a sort of cabinet for Chief Brown. Most of the Council's time was spent in trying petty criminals for such things as pilfering, or the more serious crime of cattle or horse stealing. The penalty was whipping. Not just a common ordinary whipping, it was a whipping on the bare back with green hickory switches about three feet long. When the Council met it was of more than passing interest to Virgil, for the "whipping post" (in this case a black-jack tree) stood about ten to fifteen feet outside the south window of his office, and one of his duties was to dress the wounds of the culprits who were whipped.

The prisoner was suspended from the tree by tying his arms to a stout limb; then his ankles were tied together and a rail run between his legs and an Indian sat on each end of the rail.

Twenty-five lashes by a Light Horseman were given for the crimes and it took five switches to give them. By the time five switches were used the back would be beaten to a pulp and blood would stream down around the man's feet. It was a horrible and brutal sight to watch, but Virgil never dared interfere with their tribal punishments. Amazingly, some victims never once uttered a sound, stoics as they were.

Punishment over, the victim was cut down and carried into Virgil's office where his wounds were dressed as gently as possible. While the wounds looked ugly, he did not remember any resulting in infection, although the scars were carried to the grave. Caesar told him that he knew of a woman whipped for adultery who died as a result. Her death was considered a blessing by her family.

The Seminoles then had little mercy for their own offenders. Those convicted of capital offenses were shot by a firing squad. Unbelievable as it seemed to Virgil, sometimes the prisoner was released after being convicted and told to appear for his execution on a certain day at a certain time. The released prisoner went home to his family, but he did appear at the place and time set for his execution. Then, he was duly shot and his body returned to his family for burial.

One last experience stood out in Virgil's Seminole practice. He was beginning to be restless for new challenges with less physical strain. But most important of all, he yearned for a place where medical advances might develop along with progress toward statehood, for he knew that statehood was inevitable. One hot summer day a messenger appeared at his office asking that he go "over on Salt Creek" to see an Indian who was badly hurt by another Indian. Caesar informed him, after speaking with the rider, that an amputation of the man's leg would probably be necessary. Getting together his instruments and dressings, Virgil and Caesar set out.

A gruesome sight shocked them when they arrived at Salt Creek. At a cabin in a clump of trees were several people hovering over a man lying on a quilt on the ground. One of the man's legs looked as if it had been gnawed by an animal. Caesar set about getting the story. It seemed that another Indian and the victim had gotten very very drunk and had begun to fight over an old grievance. Finally, one knocked the other into unconsciousness. Then, picking up a thin, sharp-edged rock, he delib-

erately set about to sever the unconscious man's leg. He had evidently kept at it with the fury of a maniac because skin, muscle, and a part of the bone was cut through. Virgil surmised that the bruising of the blood vessels was all that saved the man's life from being drained away by hemorrhage. Virgil and Caesar quickly placed planks, one end on a large stump and the other on a box, lifted the still unconscious man on the board and set to work. Turning the anesthetic over to Caesar, Virgil amputated the leg above the injury. Several years later Virgil saw the poor fellow sitting in front of the Courthouse in Wewoka, tin cup in hand to catch the pennies, nickles, and dimes of sympathetic passersby.

Interesting reports of a small settlement about twenty miles northeast of Wewoka called Wetumka began coming Virgil's way by the end of 1900. It was even rumored that when statehood came it might capture the county seat. Change was in the very air. Talk of the amalgamation of Indian Territory and Oklahoma Territory into the 46th state stimulated Virgil's eagerness for new worlds to conquer — hospitals, organized townships with schools, opportunities for his three growing children. The Frisco Railroad was building south from Sapulpa to Dennison, Texas. Wetumka would be on the main line and was bound to be a good town. He could feel the magnetic pull of "civilized" living drawing him away from frontier life into the many streams of urban involvement. He wanted to be a part of it. He had watched the Territory grow from lusty infancy to rambunctious childhood. Now he must participate in its maturing.

With new energy, he plunged into Indian Territory Medical Association activities. June 4th of 1901, he delivered a paper titled, "Morphinism and Treatment" at the meeting in Vinita. December 4th of that same year at a meeting in Muskogee, he was appointed to the Program Committee for Obstetrics and Gynecology, with Doctors J. L. Blakemore and G. A. McBride.

Early in 1901, Virgil took time to scout around the area of Wetumka. "Old Wetumka" was built on a hill and consisted of a very few white and Indian families. It would be reasonable to conclude that a town of any permanency must be located near the railroad, which was rapidly approaching the vicinity, but *not* nearer the hill. Following the direction in which the tracks were headed, he bought a lot

in the middle of a corn field about a mile downhill from the old settlement. There it was that he cut down the dry stalks of the previous year's crop and erected the first business building in "New Wetumka." The front section of the building would be used as a drug store and office, with temporary living quarters for his family in the back, and a tent tacked on as kitchen. Virgil drove back and forth from Wewoka frequently to watch its construction, and then bought a lot "down the street east" from this building for a residence. In his mind's eye the store would be "downtown" and the house would be in the residential section where native oak, pecan and maple trees might help lessen Emma Kate's homesickness for the Tennessee trees she remembered so well. This was also mostly in their mind's eye, for there were not many trees at that time. Wherever they went they always planted trees.

It was not easy to wind up his affairs in the Seminole Nation. It was an emotional wrench to leave his hard won Indian friends. Most of all, it was difficult to leave the now aging Caesar Bowlegs. With stoical reserve they shook hands and Virgil promised to return on visits. But although there were to be many return visits to Wewoka and the Nation, a reunion with Caesar was not to be. Soon afterward this colorful frontiersman died.

So it was that during the summer of 1901, Virgil, Emma Kate, Karl, Homer and Ruth jogged behind a handsome team hitched to a sturdy surrey over the country roads to Wetumka. Emma Kate loved good horses and refused to compromise. It was bred in her, for after the Civil War her father owned the stage between Nashville and Cornersville, Tennessee, and Capt. Billy prided himself in his fine well-groomed horses. The children were rowdy with excitement, but Virgil and Emma Kate were quiet as the horses' hooves clomped along the dusty road. It had been good living in Wewoka and the Seminole Nation. Hard, yes, but good.

Resilient as always, Emma Kate made a home there in the crude rooms back of the store building, so new that it still held the sweet odor of new wood. She helped tend store, assisted with patients both in the office and on calls, helped supervise the building of the new house down the street and still had time to teach Karl and Homer the fundamentals of

readin', writin', and 'rithmetic while she held baby Ruth on her lap.

By fall, a regular railroad schedule was established and settlers came in great numbers. Wetumka became a convenient trading point for farmers. Virgil entered into a large practice with more and more surgery coming his way, and with it the desperate need for both a telephone system and a hospital.

Virgil knew the hospital would have to come later. Not so with a telephone system. Wires were being strung across the territory like giant spider webs. Scouting around to find someone interested in installing a telephone system in tiny Wetumka was an exercise in futility. "No money in it," was the universal response. In disgust, Virgil rallied forces of his own. In no time at all, the first telephone system was installed, supervised by Virgil using mostly amateur help. He could not resist gloating a little later as the company grew and prospered.

Soon settled in the little house whose high window panes were bordered with stained glass squares that satisfied Emma Kate's aesthetic tastes, Virgil turned again to renewed activity in the ITMA, convinced that the standards set in medicine by the Association would help set the standards of medicine in the new state. Digging in with characteristic zeal Virgil studied far into the night after a full day's medical calls. He kept copious notes for future papers he hoped he would be asked to give at medical meetings. On June 4th, 1902, his hard work was rewarded when he presented a paper on "Pelvic Abscess" at the territory meeting in South McAlester. It was well received and discussed by Doctors B. F. Fortner, Vinita, and F. S. Clinton, Tulsa and two visiting surgeons.¹¹

Suddenly, the satisfying routine of working toward their goals was shattered. The unexpected happened, Emma Kate was pregnant again! How in the world could Virgil get along without her help through the months of pregnancy in a day when women were expected to stay modestly out of sight and then have her activities curtailed by months of infant care? Much later, Emma Kate said, "I'm afraid I shocked the good people of Wetumka by putting on a 'mother hubbard' and boldly going out in public to help your father." Her continued help to Virgil was really only made possible because a shy German girl came to live with the Berrys as a "hired girl." This, of course, meant that rosy-cheeked and flaxen-

haired Lucinda Sunderman became cook, housekeeper, nursemaid, companion, confidant for the children and advocate in their parents' court. The children adored her and with Emma Kate gone so much, assisting with surgery, at a birth, or preparing the dead for burial, Margaret, the latecomer, was hard put at times to know just who her mother was, Cindy or Emma Kate.

The busy parents did eventually get around to baptizing the small intruder, for there appeared in the *Wetumka Gazette* of October 10, 1907:

A very beautiful as well as biblical service was held at the home of Reverend M. W. Robison, pastor of the Presbyterian Church, on Thursday, the 3rd, inst . . . when brother Robison baptized Margaret, youngest child of Dr. and Mrs. V. Berry.

At any rate, slowed down only slightly by the new baby, Emma Kate and Virgil worked in three fields: medicine, civic planning, and the politics of pre-statehood. So confident was Virgil that Wetumka would win the county seat that he and H. H. Holman, founder and president of the First National Bank, got their heads together over plans for a small hospital. At last, Virgil's dream seemed very near reality.

About this time Virgil applied for and was granted the appointment as Frisco Railroad surgeon. He held the appointment many years. It was soon after his work with the Frisco began, that he had a small part in solving an attempted fraud on the line. He always referred to it as the "Case of the Man in the Plaster Cast." It seems that a young freight clerk recently come to town was standing in the doorway of a boxcar checking a freight waybill when a switch engine backed into the car knocking him out the door onto the ground, a distance of about five feet. He resisted all help insisting that he be taken home and that his doctor be called.

Frisco officials were duly notified of the accident and they instructed Virgil to examine the patient and send a report. Virgil had already made an attempt to see him and been rebuffed. Trying again, he found the man encased from chin to hips in a plaster cast. The attending doctor's prognosis was "back injury with possible spinal fracture." Of course, there was no x-ray equipment available in the territory at that time, nor were there laws making an examination by the railroad physician mandatory. Virgil filed the meager report adding under

"Remarks" that he was skeptical of the seriousness of the injury.

The case soon went to court, the plaintiff having filed suit for \$50,000. It took the jury only two hours to bring in a settlement of \$30,000 — a very large sum in those days. Soon afterward, two neighbors were passing by the house of the injured man. The case had caused quite a stir in the little community and the house in which the newly "rich" man lived was viewed with intense curiosity. Noticing a crack at the bottom of a window shade, the two neighbors stopped to peek. Much to their astonishment, there on the floor free of cast and totally in control of active legs the "paralytic" was playing with his two sons. The case was reopened and at the new trial the sworn evidence of the witnesses came as a bombshell. The young man was sent to the penitentiary and his physician disappeared overnight.¹²

1904 through 1910 were probably Virgil's most productive years of writing and delivering papers before the ITMA. Perhaps nothing Virgil wrote, though he was an inveterate journal keeper, caused his personality to come through more clearly than his papers. They are absorbing reading. Of course, a part of the fascination is the fact that they were so near and yet so far from today's medical discoveries and procedures — especially the sophisticated diagnostic and life-saving techniques available in today's hospitals. Three of the interesting articles written with his pungent no-nonsense directness were "The Forceps, When, and How to Use Them," "Gangrenous Inflammation of the Caecum," and "Drainage of the Gall Bladder."¹³

June 20th, 21st and 22nd of 1905, the annual meeting of the Indian Territory Medical Association was held in Tulsa. *The Oklahoma Medical Journal* stated editorially, "This was one of the best meetings in its history. An excellent program was rendered, and the papers unusually good." At this meeting Virgil was elected president of the ITMA, and one can forgive him for the pride he felt in having been recognized by members of his own profession. Besides, it had been a long, rocky road from an Indiana farm to this significant, to him, milestone.¹⁴

References will follow the final installment of this article.

Installment IV "From Territory to Statehood" will appear in the next issue of *The Journal*. □

Physician Manpower in Oklahoma in 1978

C. S. LEWIS, JR., MD, FACP

The number of practicing non-federal MDs in Oklahoma has increased 59 percent in 11 years from 2,240 in 1967 to 3,551 in 1978.

The number of non-federal practicing DOs has increased 19 percent from 353 in 1967 to 419 in 1978. This increase of 53 percent in the total number of practicing physicians more than exceeds the need expressed in 1968. The increased scholarship programs and residency training programs administered through the Physician Manpower Training Commission and the increased number of students in University of Oklahoma College of Medicine, Oklahoma City, and the University of Oklahoma Tulsa Medical College, and the Oklahoma College of Osteopathic Medicine and Surgery have had a marked effect on increasing the number of primary care physicians in Oklahoma. The details of training and distribution of physicians are outlined.

For more than ten years the need for increased numbers of physicians in the United States has been well recognized. In Oklahoma the need to increase physicians in all parts of the state and particularly in the field of primary care has been addressed in some unique ways. The results of these efforts and the current status of physician manpower in Oklahoma are the subjects of this paper.

It was noted in 1969 by Dr Kelly West that there were 2,240 practicing MDs and 353 practicing DOs in Oklahoma, and that it would be necessary to add an additional 900 physicians to bring Oklahoma up to the national average of physician population ratio.^{1, 2} The American Medical Association Statistical Analysis indicates that in 1976 Oklahoma was 42nd in the nation in physician-population ratio.³ In the last two years there has been a rather remarkable increase in the number of medical students, residents and practicing physicians in Oklahoma. These increases will be documented in this paper.

The number of medical students being trained in Oklahoma has increased as noted in Chart 1 from 95 in 1965 to 154 graduates in 1978 and is projected to increase to 177. This has been brought about by increasing the size of the class at the University of Oklahoma Health Sciences Center, Oklahoma City Cam-

Presented at the regional meeting of the Oklahoma Society of Internal Medicine and the Oklahoma Chapter of American College of Physicians on October 19 and 20, 1978, at the Shangri-La Lodge, Grand Lake, Afton, Oklahoma.

UNIVERSITY OF OKLAHOMA
(Okla. City and Tulsa combined)

Year	No. Graduates
'65	95
'70	94
'75	137
'78	154
'80	177
'85	176

IN U.S.A.

Year	No. M.D. Graduates
'70	8,000
'75	13,500
'78	14,000
'80	15,600
'85	16,500

OKLAHOMA COLLEGE OF
OSTEOPATHIC MEDICINE & SURGERY

M.D.s and D.O.s

Year	No. Graduates	Year	Total
'78	56	'78	210
'80	80	'80	257
'85	80	'85	256

Chart I

Medical graduates (Oklahoma City and Tulsa programs combined) and osteopathic graduates by year.^{4,5}

pus and by the establishment of the University of Oklahoma Tulsa Medical College programs for 3rd and 4th year students in Tulsa in 1973. These increases parallel the national increase in medical graduates which will reach 16,500 in 1985, which is more than double the number graduated in 1970.⁴ In addition, the Oklahoma College of Osteopathic Medicine and Surgery graduated its first class in 1978. The first class consisted of 56 graduates and is projected to increase to 80 graduates by 1980. The projected totals for MD and DO graduates in 1980 is 257 per year, and is projected to remain essentially at that level.⁵

The need to increase residency training positions in Oklahoma to accommodate all graduates was recognized in 1974. The Oklahoma State Legislature in the spring of 1975 enacted the Oklahoma Physician Manpower Training Commission legislation.^{5, 6} The first commission was appointed by the governor and started operation in July of 1975. It was noted that in 1974 there were 131 medical graduates of the University of Oklahoma College of Medicine and only 85 first year residency positions in the state of Oklahoma.⁶ Chart 2 documents the growth of postgraduate training programs over the past five years. The total number of residency positions at the University of Oklahoma Health Sciences Center in Oklahoma City increased from 257 in 1974 to 420 positions in 1978. The residency programs in Tulsa through the Tulsa Medical Education Foundation and University of Oklahoma Tulsa Medical College combined programs increased from a total of 45 in 1974 to 110 in 1978. The DO internship and residency programs increased

from 44 positions in 1974 to 59 in 1978. The number of positions partially funded by Physician Manpower Training Commission funds indicate an increase from 32½ partially funded positions in 1975 to 153 in 1978. It would appear that the PMTC funds have had a catalyzing effect on the growth of residency programs in Oklahoma over the past four years.⁵ The total number of first year positions available to MD and DO graduates combined has increased from 90 in 1974 to 207 in 1978. Since there were 210 graduates from MD and DO schools in 1978, the goal of providing first year residency positions for the same number of people as graduates has almost been reached. Current projections indicate that this goal will be reached in 1979.⁵

The need to increase primary care residency training has been well recognized.^{7, 8} All of the

POSTGRADUATE TRAINING IN OKLAHOMA 1974-1978



Chart 2

The number of resident physicians is shown by program — MD program in Oklahoma City, MD program in Tulsa and DO program and the totals. For each year is shown the total number of positions, the number of first year positions, the number of total primary care positions, the number of positions other than primary care, and the Physician Manpower Training Commission partially funded positions.^{5,11}

NEW RESIDENCY POSITION BY DISCIPLINE

Years	Family Practice	Internal Medicine	OB/GYN	Pediatrics	Osteopathic Internships	Total
'75 - '76	12	9	0	1	14	36
'76 - '77	19	15	2	1	3	40
'77 - '78	18	12	2	4	1	37
'78 - '79	13	14	0	11	2	40
TOTAL	62	50	4	17	20	153

Chart 3

New residency positions by discipline by year. Note all new positions partially funded by Physician Manpower Training Commission funds are in primary care.⁵

positions partially funded by Physician Manpower Training Commission administered state funds have gone into primary care programs. In 1976 the number of primary care positions for the first time was more than 50 percent of total residency positions for all years, and in 1978 there are 325 primary care positions compared to 264 non-primary care residency positions. The Physician Manpower Training Commission legislation provides that primary care shall consist of emergency medicine, family practice, internal medicine, ob-gyn and pediatrics. All other training programs are listed in "other than primary care" category. Chart 3 indicates the number of Physician Manpower Training Commission partially funded new residency positions by year and by discipline. The largest group is family practice and the next largest internal medicine.

The majority of University of Oklahoma College of Medicine graduates in 1978 chose primary care residencies. If one includes flexible first year residencies with family practice, internal medicine, pediatrics and ob-gyn positions, 72 percent of the graduating class chose primary care training in 1978 (see Chart 4).

The Physician Manpower Training Commission has been charged with administration of the Rural Scholarship Program which was es-

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TYPES OF RESIDENCIES CHOSEN BY
UNIVERSITY OF OKLAHOMA
COLLEGE OF MEDICINE GRADUATES 1978

Type of Residency	Total Class	Okla. Residents	Out-of-State
Family Practice	38 (25%)	32 (26%)	6 (24%)
Internal Medicine	30 (20%)	22 (18%)	8 (32%)
Pediatrics	9 (6%)	9 (7%)	0 (0%)
OB/GYN	13 (9%)	12 (10%)	1 (4%)
General Surgery	19 (13%)	14 (11%)	5 (20%)
Specialties (Pathology, Radiology, etc.)	22 (15%)	18 (14%)	4 (16%)
Flexible	17 (11%)	16 (13%)	1 (4%)
Total	148 (100%)	123 (100%)	25 (100%)

Primary Care

61% — Family Practice, Internal Medicine, Pediatrics, OB/GYN

72% — Including Flexible Positions

Chart 4

Residencies chosen by graduating class, University of Oklahoma Health Sciences Center in 1978. (Unpublished data, PMTC)

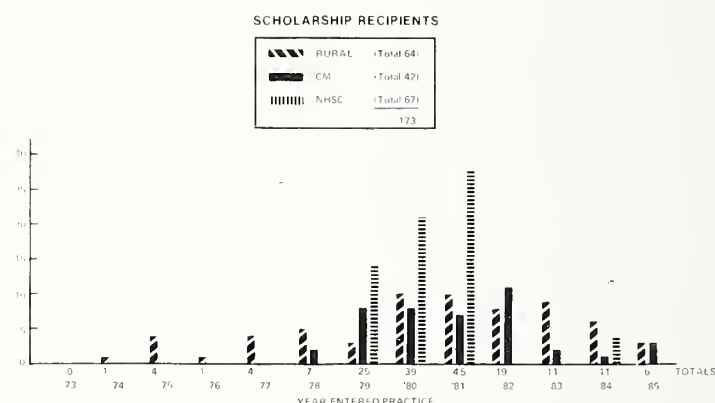


Chart 5

Recipients of the Rural Scholarship Program scholarships, the Community Matching Scholarship Program, and the National Health Service Corps Scholarship Program are indicated by year it is anticipated they will enter practice. Seventeen of the 173 have entered practice, the remainder are in training programs. (Unpublished data, PMTC)

COMMUNITIES REPRESENTED BY MATCHING PROGRAM

Sulphur — 2	Carnegie — 2	Cordell	Spiro
Cherokee — 2	Anadarko — 2	Broken Bow	Boise City
Hominy	Grove	Yale	Perry
Moreland	Hulbert	Thomas	Clinton
Talihina	Sayre	Salina	Ft. Cobb
Lindsay	Sallisaw	Fairfax	Fairview
Eufala — 2	Hugo	Welch	Seiling
Beaver	Frederick	Binger	Okemah
Stillwell — 2	Cleveland	Edmond	Okeene

Chart 6

The communities marked with a 2 have raised funds to match for two different student scholarships. (Unpublished data, PMTC)

COMMUNITIES REPRESENTED BY RURAL SCHOLARSHIPS

Stilwell	Ringling	Cordell
* Purcell — 2	Poteau — 2	* Cushing
Coweta — 2	Hugo	* Warner
Kansas	* Idabel	

* Remained (66%)

Chart 7

Students in Rural Scholarship Program do not pick their community until training is completed. These communities have had one or two scholarship recipients return. Of those returned, 66 per cent have remained after their obligated period. (Unpublished data, PMTC)

established in 1970 by the Oklahoma State Medical Association and the Community Matching Program which was established by state law in 1975. In addition, the Commission by virtue of a contract with the National Health Service Corps places Oklahomans who have obligated service through the National Health Service Corps in areas of need in Oklahoma.⁵

Of the total of 173 scholarship recipients in the three programs only 17 had completed training and had entered practice by July of 1978. In 1979 there will be 25 new physicians with obligations to practice at least two years in either under-served areas or in rural areas under 7,500 population, or in communities which have contracted with a student through the Community Matching Program over a period of several years. The numbers of new physicians who are obligated to serve is indicated by year of beginning practice in Chart 5. The communities which will receive new physicians under these programs are indicated in Chart 6 and Chart 7.⁵ All of the physicians who are obligated under the National Health Service Corps will be placed in areas which have been designated as medically under-served in the state.⁵

In 1978 there were 4,434 MDs and 528 DOs in the state; 3,332 are non-federal full-time practice MDs and 409 are non-federal full-time practice DOs. Chart 8 documents the number of federal physicians who are in practice which includes the 58 physicians now serving in the Indian Health Service in Oklahoma through the National Health Service Corps Indian Health Service program. In addition the number of residents and faculty by professional discipline is indicated. In computing the full-time equivalent primary care physicians in the state, it is estimated that one-third of

the time of the residents in primary care is spent in patient care, and that one-third of the time for the full-time faculty in primary care programs is spent in patient care. It is felt these estimates are very conservative.^{7, 9, 10} As indicated in Chart 8 there are 2,013 MD primary care full-time equivalents and 347 DO primary care full-time equivalents. This figure represents a total of full-time practicing primary care physicians plus one-third of the residents and faculty in primary care training programs.^{11, 12}

Availability of medical care depends not only on the number of physicians and the kind of physicians that are available, but also the geographical distribution of physicians. There are a number of methods of estimating the number and kind of physicians required. Two methods have been used in this paper. The first is a comparison of physician to population ratio. The number of practicing non-federal MDs has increased 59 percent in eleven years from 2,240 in 1967 to 3,551 in 1978. During the same period of time, the non-federal practicing DO population has increased 19 percent from 353 to 419. Therefore, the total increase in practicing physicians has been 53 percent over an 11-year period. (See Chart 9) The population of Oklahoma has increased 14 percent during this period.¹³ The number of physicians per 100,000 population has increased from 105 in 1967 to 141 in 1978. This represents an increase of 34 percent. The number of people per physician has decreased from 951 in 1967 to 708 in 1978. American Medical Association statistics³ indicate Oklahoma is the 42nd state in the nation in physician-population ratio in 1976. The 1978 physician-population ratio for Oklahoma of 141 per 100,000 people is equal to the 13th position in the 1976 AMA statistical table.

The second method for estimating physician need is on the basis of estimated number of annual office visits required by the population. The "Health Plan for Oklahoma" published by the Oklahoma Health Systems Agency in 1978¹⁴ estimates the annual number of office visits to the physicians by Oklahomans in 1978 was 10,336,000 and in 1980 will be 11,691,000, and in 1985 12,010,000.¹⁴ (Chart 10) The Department of Health, Education and Welfare estimates that the primary care physician annual office visit total varies between 5,887 and 8,959.¹⁵ The Oklahoma Health Systems Agency figures¹⁴ indicate an average produc-

Chart 8

Source: Oklahoma State Medical Association Directory, University of Oklahoma Health Sciences Center, Oklahoma City, University of Oklahoma Tulsa Medical College, Oklahoma State Board of Medical Examiners, US Public Health Service. US Department of Defense, US Veterans Administration. Oklahoma College of Osteopathic Medicine and Surgery, Oklahoma Osteopathic Annual Directory 1977.

PHYSICIAN : POPULATION RATIO

	1967	1978	Increase
Practicing M.D. (non-Fed.)	2240	3551	59%
Practicing D.O. (non-Fed.)	353	419	19%
TOTAL	2593	3970	53%
Population — Oklahoma	2,467,000	2,811,000	14%
No. phys./100,000 population	105	141	34%
No. people/phys.	951	708	

Chart 9

Source: Oklahoma State Medical Association Directory 1978, Oklahoma Osteopathic Annual Directory 1977, 1978, Oklahoma Population Projections, Oklahoma Employment Security Commission 1976.

NEED-BASED PHYSICIAN REQUIREMENTS

Year	Oklahoma annual physician office visits	Avg. annual office patient load/phys. (est.)		
		HEW	OHSA	AMA
1975	10,336,000	5887-8959	5237	6325
1980	11,691,000			
1985	12,010,000			

Year	No. primary care FTE physicians needed (est.)			Oklahoma — 1978
	HEW	OHSA	AMA	
1975	1154-1756	1974	1634	2013 PC M.D. FTE
1980	1305-1986	2232	1848	347 PC D.O. FTE
1985	1340-2040	2293	1899	2360 Total phy.

Chart 10

Source: Oklahoma Health Systems Agency Plan for Health in Oklahoma, 1978. Physician Manpower Requirements, DHEW, Graduate Medical Education National Advisory Committee, DHEW publication, #HRA 78-10. Profile of Medical Practice 1977, American Medical Association, 1977.

tivity of 5,237 patient visits annually, and the American Medical Association statistics¹⁶ project our average primary care physician productivity of 6,325 patient visits per year. Chart 10 indicates the number of primary care full-time equivalent physicians needed with each of these assumptions. The largest need estimate would be 2,293 physicians in 1985 on the basis of the Oklahoma Health Systems Agency Plan. Oklahoma has already exceeded this total with 2,360 primary care physician full-time equivalent positions. The full-time equivalent figure takes into account those physicians who practice part-time and includes only that portion of their time which is spent in practice of primary care.

An attempt to identify geographic distribution of physicians has been approached in three

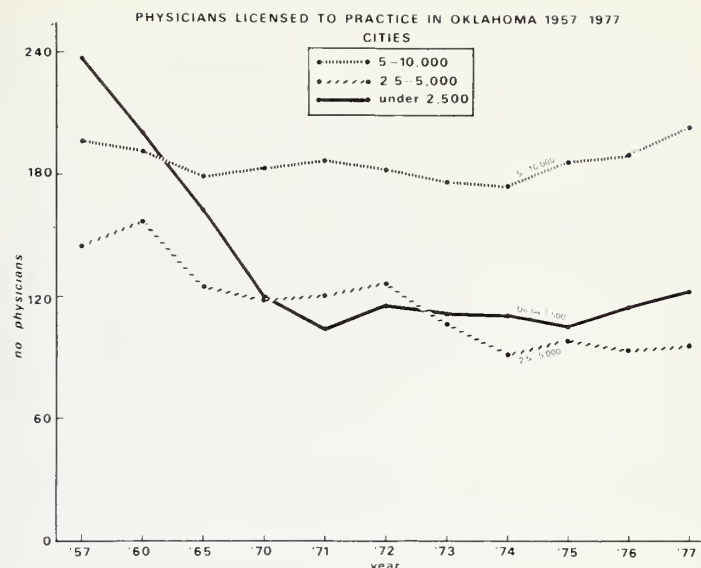


Chart 11

Source: Board of Medical Examiners, State of Oklahoma, Statistical Report 1977.

NUMBER OF ACTIVELY PRACTICING PHYSICIANS IN OKLAHOMA JANUARY 1970 & 1977 BY COUNTY

County	M.D.'S		D.O.'S		County	M.D.'S		D.O.'S	
	1970*	1977**	1970*	1977**		1970*	1977**	1970*	1977**
Adair	5	3	2	1	LeFlore	8	19	7	7
Alfalfa	2	3	1	1	Lincoln	8	8	3	2
Atoka	2	2	4	2	Logan	11	10	2	1
Beaver	4	3	—	—	Love	—	1	3	4
Beckham	17	16	—	1	McClain	4	5	1	—
Blaine	9	11	1	1	McCurtain	6	6	5	5
Bryan	11	12	1	2	McIntosh	6	5	4	3
Caddo	11	8	2	4	Major	1	1	1	3
Canadian	17	18	3	4	Marshall	3	2	3	4
Carter	32	51	9	6	Mayes	4	9	7	9
Cherokee	5	16	—	6	Murray	6	4	1	3
Choctaw	5	5	2	1	Muskogee	71	92	4	3
Cimarron	1	2	—	—	Noble	4	5	1	1
Cleveland	69	116	3	7	Nowata	2	2	4	3
Coal	2	3	—	—	Okfuskee	6	5	2	—
Comanche	45	91	2	1	Oklahoma	746	1315	68	65
Cotton	2	1	2	2	Okmulgee	19	23	10	5
Craig	12	12	3	3	Osage	10	9	7	1
Creek	16	20	8	7	Ottawa	10	15	9	9
Custer	20	21	1	2	Pawnee	2	6	4	6
Delaware	5	7	—	—	Payne	38	56	5	2
Dewey	—	2	2	—	Pittsburg	27	33	4	2
Ellis	7	7	—	—	Pontotoc	29	40	1	—
Garfield	62	70	16	22	Pottawatomie	27	50	1	3
Garvin	11	11	3	5	Pushmataha	3	4	4	2
Grady	24	35	4	5	Roger Mills	1	1	—	—
Grant	2	2	2	2	Rogers	11	15	6	8
Greer	6	8	—	—	Seminole	10	12	1	1
Harmon	3	1	—	1	Sequoyah	2	4	3	4
Harper	4	3	—	—	Stephens	19	27	4	4
Haskell	2	2	2	4	Texas	5	8	3	4
Hughes	12	12	1	1	Tillman	7	4	2	1
Jackson	24	24	1	1	Tulsa	465	734	163	196
Jefferson	5	7	1	—	Wagoner	2	3	7	9
Johnston	2	4	—	—	Washington	47	65	3	1
Kay	47	53	10	3	Washita	4	4	—	1
Kingfisher	3	8	4	5	Woods	6	6	1	1
Kiowa	8	5	1	1	Woodward	11	15	2	2
Latimer	1	2	4	4	TOTAL	2,156	3,300	451	480

* A Study of Oklahoma's Needs in Selected Health Manpower Fields
 ** Oklahoma State Board of Medical Examiners
 Directory of the Oklahoma Osteopathic Association

ways. Figures from the Office of the Board of Medical Examiners, State of Oklahoma¹² demonstrate that, although there has been a very significant increase in the number of physicians in cities over 10,000 in size over the past 20 years (Chart 11) there has also been a significant increase in MD population in towns under 5,000 during the last two to three years.



Chart 13

Source: Oklahoma State Medical Association Medical Directory 1978, Oklahoma Osteopathic Annual Directory 1977-78. The white area on the map represents areas more than a 15-mile radius from a primary care physician.

In towns from 5,000 to 10,000 size there were 175 MDs in 1974 and 204 in 1977. In towns from 2,500 to 5,000 population there were 92 MD physicians in 1974 and 96 in 1977. In towns under 2,500 size there were 106 MDs in 1975 and 123 in 1977. The MD and DO physician population by county comparing figures for 1970 and 1977 are demonstrated in Chart 12.

Another way to look at physician distribution is to determine how many people in the state of Oklahoma live more than 15 miles from a primary care physician. The shaded areas on the map in Chart 13 represent the areas of the state in which there is a primary care physician within a radius of 15 miles. There are some areas in which a person may need to drive further than 15 miles due to the geography and road conditions in the area. The white areas indicate areas in which there is not a physician within 15 miles. The total number of people living in the white areas is approximately 9,650 which is .36 of 1 percent of the population. In other words, over 99 percent of the population of Oklahoma live within a 15-mile radius of a primary care physician.

The attrition rate of physicians is made up of the number who die each year and the number who retire each year or move out of the state. Chart 14 presents the death figures for the last five years and retirement totals for the last two years. Therefore, it is estimated that approximately 40 physicians will die per year and approximately 40 will retire per year which results in an attrition rate of 80 per year. The State Board of Medical Examiners statistical figures indicate an increasing number of

M.D. ATTRITION

Year	No. Deceased M.D.	No. Reported Retired
'73	30	
'74	33	
'75	22	
'76	30	102
'77	39	144

Assumptions

40 die/yr.

40 retire/yr.

80 to be replaced/yr.

Chart 14

Source: Board of Medical Examiners, State of Oklahoma, Statistical Report 1977.

licensed physicians moving into the state.¹² In 1967 a total of 90 physicians died, retired or moved out of the state, and a total of 225 new licenses were issued for a net increase of 135 physicians. In 1976, 115 physicians died, retired or moved out of the state, and 375 new physicians were licensed for a net gain of 260. In 1977, 184 physicians died, retired or moved out of the state, and 539 new physicians were licensed for a net gain of 355. A part of the gain is reflected in the fact that in 1978 Oklahoma graduated 210 new physicians and had an attrition rate of 80 which indicates an addition of 130 new physicians net for the year 1978.

It is difficult to determine the exact reasons for the increased number of physicians moving into the state, but these new physicians have helped to solve the physician shortage problem in Oklahoma.

The most significant factors in the increased number of physicians in Oklahoma seem to be related to the increased number of students and resident physicians. The effect of the scholarship programs is just beginning to be felt.

The projected need for 900 additional physicians expressed in 1968 has been surpassed. Oklahoma continues to be in a very positive net gain position. Most importantly, the projected needs for primary care physicians for 1985 have already been surpassed. This does not mean that all the manpower problems are solved, or that the distribution of physicians is wholly adequate. It does mean that the pro-

grams put into place over the last decade have been effective in providing significantly increased numbers of physicians to serve the people of Oklahoma. □

ACKNOWLEDGMENTS

We gratefully acknowledge the excellent work of Mr. James Lewis of the Physician Manpower Training Commission and Mr. David Bickham of the Oklahoma State Medical Association in collecting data and in preparing this paper for publication.

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Nursing Services

During FY-1977 the public health nurses employed by Oklahoma State Department of Health provided nursing services to residents of 58 counties. These services were given primarily in the home, school, office or in a clinic setting. Public Health nurses function as a member of the health team of the local county health departments. They provide services to promote and maintain wellness and to prevent illness as well as services to the homebound who are under the care of a physician.

Time spent in giving direct care to individuals was calculated for FY-1977 and the following is the percentage utilized for specific program areas:

Communicable Disease	24%
Chronic Disease	28%

Maternal & Child Health	16%
Family Planning	20%
Home Health Care	9%
Other	3%

During FY-1978, 19,192 clinics were held in county health departments (excluding Oklahoma City-County Health Department and Tulsa City-County Health Department) serving 460,418 Oklahomans. Health screenings of 540,852 were done for anemia, hypertension, cancer of breast and cervix, diabetes, glaucoma, loss of hearing, gonorrhea, syphilis, and tuberculosis. Any clients found to have a problem are referred to their private physicians for medical care. Followup to see that the client has been seen by his physician is done. In many instances the public health nurse has had several contacts with the client before the client actually sees the private physician. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR SEPTEMBER, 1978

DISEASE	September 1978	September 1977	August 1978	Total To Date	
				1978	1977
Amebiasis	6	3	1	26	17
Brucellosis	1	—	—	4	3
Chickenpox	—	11	—	—	926
Encephalitis, Infectious	4	—	2	17	11
Gonorrhea (Use Form ODH-228)	1232	1166	1253	10253	9681
Hepatitis, A, B, Unspecified	75	52	51	534	557
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	—	—	—	16	10
Meningitis, Aseptic	11	9	6	50	38
Mumps	—	14	—	—	486
Rabies in Animals	16	15	7	149	200
Rheumatic Fever	—	—	—	—	2
Rocky Mountain Spotted Fever	6	5	10	51	65
Rubella	1	2	—	12	31
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	1	3	—	13	58
Salmonellosis	41	49	45	222	210
Shigellosis	47	17	36	249	47
Syphilis, Infectious (Use Form ODH-228)	11	8	11	86	65
Tetanus	—	—	1	3	—
Tuberculosis, New Active	24	24	22	259	235
Tularemia	1	2	—	4	10
Typhoid Fever	—	—	—	2	1
Whooping Cough	3	3	2	13	8

The OSMA Board of Trustees has voted to oppose any change in the Principles of Medical Ethics without the prior approval of the AMA House of Delegates. This action includes the recognition of chiropractors as licensed limited practitioners. The action came at the Trustees' October meeting.

Dr C. S. Lewis, Jr., chairman of the Council on Planning and Development, told the Trustees that the AMA is changing the original principles to settle a lawsuit filed by a Pennsylvania chiropractor against the AMA.

OSMA President, Dr Marvin K. Margo, said the AMA trustees need direction, specifically with a resolution, to turn them around and not allow chiropractic to become a part of medicine.

There was much discussion over the AMA's position and what might happen during the AMA House of Delegates meeting in December. The OSMA Trustees voted to submit a resolution to the winter meeting.

In other business, Dr Lewis reported that the Council on Professional and Public Relations is continuing to watch very closely the development of the debate on National Health Insurance. Funds are available to help promote OSMA's position and the council will recommend the expenditure of these funds at the appropriate time.

It was the general feeling of the Planning and Development Council that the "Man-in-Washington" program has been successful. The Council on Governmental Activities suggested that the OSMA work with other organizations, including the AMA, to see that possible harmful federal regulations which cannot be defeated are first tested via a demonstration project.

In all, the board approved five resolutions for submission to the AMA. They are: Deregulation of the Medical Profession; Support for "Man-in-Washington"; Support for Rural and Community Hospitals; Bringing VA Hospitals into Compliance with Federal Regulations; and Changes in Medical Ethics.

Dr Floyd F. Miller said he felt the AMA would reject the "Man-in-Washington" resolution and this would adversely affect the opinion of other states who are now sympathetic toward the project.

John Montgomery, OSMA's Washington representative, spoke in favor of the resolution, stating that the AMA probably does not under-

stand the program well and the facts need to be presented to them and the public. Dr Orange M. Welborn brought out that many resolutions are introduced to the AMA with the idea of "planting seeds."

Eventually the motion to approve the resolutions was accepted.

Rejuvenation of the statewide CPR training program by the Council on Public and Mental Health is another goal reported by Dr Lewis. A poll generated over 200 responses from physicians stating they were willing to cooperate in providing health education to the public, another council project.

The trustees also discussed a recommendation made by the Council on Medical Education that the OSMA enter into a six-month trial program with the Oklahoma University Health Sciences Center to provide a continuing record of CME credits for OSMA members. Physicians would report their CME courses to the OUHSC computer center and the center would provide a schedule of courses.

While the Council on Medical Education recommended acceptance of the proposal, the Council on Planning and Development recommended rejection. The trustees voted down the proposal.

In other business, the Council on Planning and Development reported that OSMA members had been well-represented by the Council on Members Services and Rod Frates in their negotiations with Hartford. The Council recommended that the board continue with Hartford for the next year, accepting the 32 per cent increase in rates in professional liability insurance.

Executive Director David Bickham reported on the negotiations between the Council on Members Services and the Hartford Insurance Company. He said the only alternative to acceptance of the increase in the premiums for professional liability insurance would be to form a captive insurance program. Such an action was not recommended, he said, since funds will not be available to do this until 1980.

It was also pointed out that the INA had approached the council to bid on OSMA's program but still cannot approach the Hartford's rates at this time. Even with the increase the OSMA program remains among the least expensive in the nation.

Trustees also reviewed the life membership applications of J. Floyd Moorman, MD, Richard L. Harris, MD, James P. Dewar, MD, W. W. Sanger, MD, Oklahoma County and Joseph S. Raff, MD, Carter-Love-Marshall County. They were all accepted.

Finally, David Bickham reported the OSMA now has 2,481 regular members, 202 resident and junior members, 200 life members and 224 potential members. Trustees asked the county societies to get these memberships in quickly so that, by December 31, the OSMA may exceed 3,000 members. □

OURS Takes Lead At VE Conference

Organization put Oklahoma into the leading role at the November Chicago Voluntary Effort

conference, four representatives of the Oklahoma Utilization Review Systems, (OURS) reported.

Oklahoma strode to the front with a tabulated cost reduction already on the books while the other states are still caught in the throes of organizing labor, business and the medical professions.

Aggressive steps taken by the Oklahoma Medical, Osteopathic and Hospital Associations advanced the progress a year ahead of the nation. Some state voluntary programs are not far behind Oklahoma due to state legislation mandates, while other states are experiencing problems getting groups to organize.

"We have accomplished more while other states are organizing. I suspect we are the first state in the nation to have data compiled to indicate a downward trend in cost. We will have unbiased data as soon as our books have been audited," OSMA Executive Director David Bickham said.

The four Oklahoma representatives were: Dr Marvin Margo, vice-chairman of Voluntary Effort; Cleveland Rodgers, executive director of Oklahoma Hospital Association; Dick Moody, chairman of OHA and Bickham. □

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Carter Seeks Controls; VE Decreases Cost

While the Council on Wage and Price Stability chairman was praising the success of the Voluntary Effort to contain hospital costs, President Carter was telling the American people that direct controls were mandatory to dampen inflation.

COWPS Chairman Barry Bosworth told a meeting of the VE Steering Committee in Washington, DC, "We have reviewed the Voluntary Effort in some detail. We are eager to work with the VE on a cooperative basis and hope to learn from this experience. Hospitals are one of the very few industries in which deceleration has succeeded and this is significant considering the rate of inflation in the rest of the economy."

Carter maintained, in a national broadcast, that the best way to make substantial inroads into medical care cost inflation is to institute direct controls.

The administration attempted to enact cost containment legislation for a problem the leaders of the Voluntary Effort say is decreasing.

The rate for growth of hospital expenditures during the first seven months of 1978 was the lowest since 1974. The decrease in the rate of increase in hospital expenditures by 2.8 per cent thus far in 1978 indicates a trend which shows that the VE goal of a two per cent reduction will definitely be accomplished this year, even with anticipated seasonal increases and in spite of the growing inflation rate in the economy, according to Paul Earle, VE executive director.

The VE was organized late last year and reports that increases in the costs of health care have decelerated from an annual rate of 9.5 per cent to an annual rate of less than 8.5 per cent. This was done while the Cost of Living Index was jumping from 5.8 per cent to 9.5 per cent.

The AMA applauded President Carter's call for voluntary controls, but disapproved of his singling out the health care industry for man-

datory controls at a time when the industry has his own council's approval.

"It would be more in keeping with the President's own white paper on inflation if he would allow the VE of the AMA, the AHA and the FAH sufficient time for its voluntary controls to continue the decline in escalation seen in the industry this year. President Carter has told the American people that it will take time for his voluntary program to work. He should allow time for other programs to work before asking Congress for mandatory controls," Dr James H. Sammons, executive vice-president of the AMA, said.

Participants in the Voluntary Effort are the AMA, the American Hospital Association and the Federation of American Hospitals. □

Medical Doctors Claim Narrow Victory, 13-10

The medical doctors team claimed a narrow victory in the third annual October Invitational Indoor Medical - Dental Tennis Team Match.

Successful for the third year, the medical team won 13 matches to the dental team's ten and one tie.

"The real victory was in good fellowship and friendships that developed during the matches. Each year the dental team pulls in young talent, but we are a bunch of workhorses," S. R. McCampbell, MD, co-chairman, said.

He added that the doctors will become suspicious of the dental team if Bjorn Borg enters the competition.

Participants in the medical win were: Farris Coggins, Ken Coffee, Larry Killibrew, Stan McCampbell, Dan Lane, Chester Beam, John DeVore, Ben Love, Harry Singleton, Ron Elkins, Jack Barney, George Jennings, L. O. Laughlin, Phil Maguire, George Jay and Warren Felton.

Doctors interested in joining the American Medical Tennis Association should contact Dr Farris Coggins, 5700 N.W. Grand Boulevard or 943-8521. □

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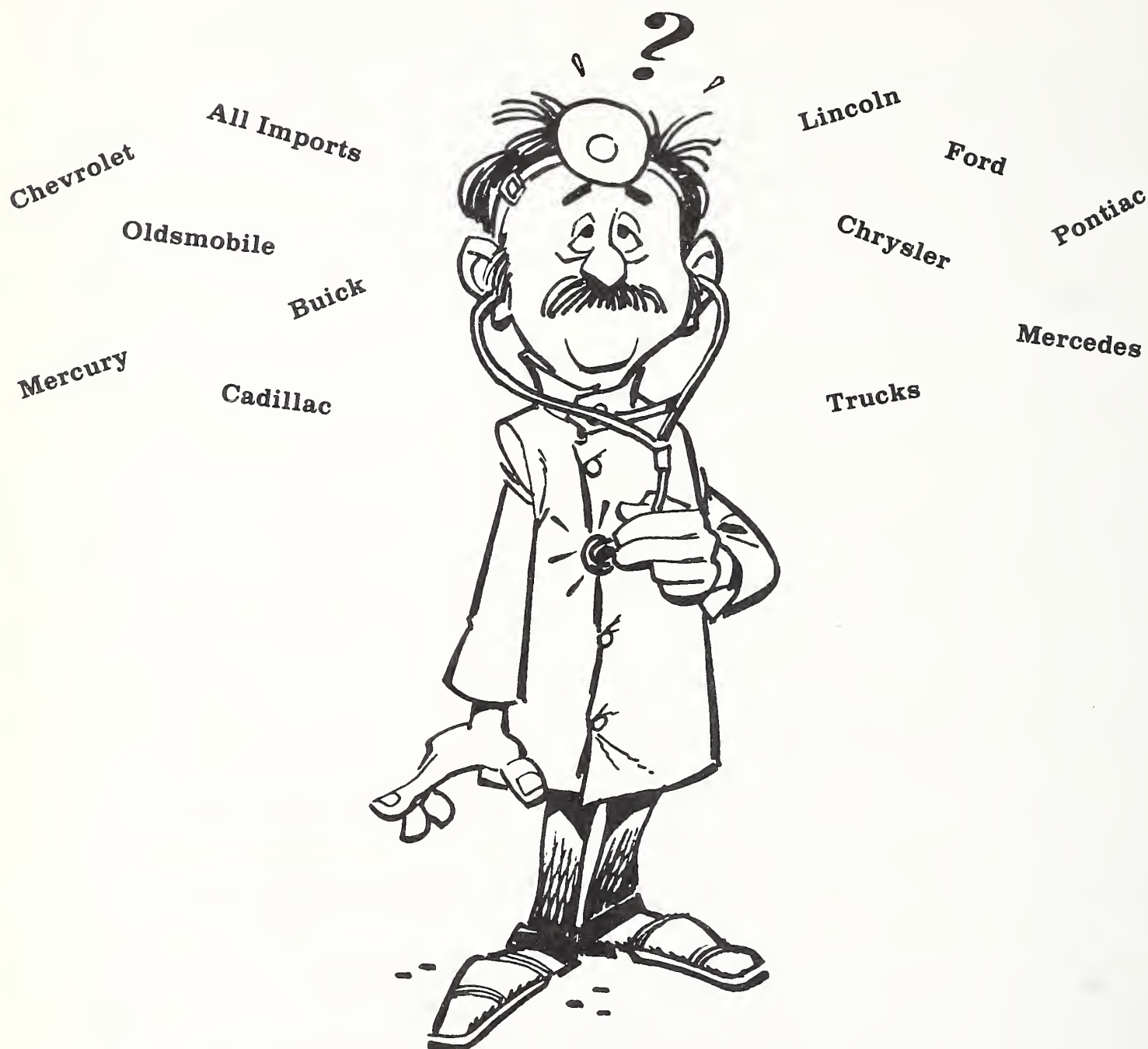
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95th Congress Blocks Carter's Priority Programs

President Jimmy Carter's top priority health bills were blocked from passage in the closing hours of the 95th Congress or fell victim in the rush for adjournment.

While the Administration waged an all-out fight for hospital cost containment, the OSMA, the American Medical Association and other health provider groups resisted with success.

Adding to the problems faced by the Administration was the Congressional resistance to federal controls, divided committee jurisdiction in both the House and Senate and the success of The Voluntary Effort program to curb health care costs.

Capitol Hill veterans said they could recall no other adjournment rush with such frantic activity and such intense lobbying.

Both Carter and HEW Secretary Joseph Califano had said the cost containment measure was a necessary first step toward national health insurance, and they got encouragement five days before adjournment.

The Senate approved a diluted measure by a 47 to 42 vote after defeating the Admin-

istration's original plan, offered by Senator Edward Kennedy, by a 69-18 tally. The approved bill would have invoked federal controls only if the private sector effort failed to reduce hospital inflation by two per cent a year.

Opposition was softened by an amendment that appeared to offer every hospital an exemption from controls.

Other major health bills lost in the crush included the Clinical Laboratory Improvement Act, the Child Assessment Program, the Health Planning Program extension, with provisions involving physicians' offices and certificate of need, the sweeping drug reform measure and Medicare amendments.

However, the \$56 billion appropriation bill for the Labor Department and HEW was adopted with compromise language covering federal funding for Medicaid abortions.

The Health Services bill containing authorizations for such programs as mental retardation and teenage pregnancy cleared Congress after aid for establishment by hospitals of primary care centers was reduced to a demonstration program. Aid for biomedical research was approved. The health maintenance organization extension program was also approved. □

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Rural Hospitals Found Safe For Delivering Babies

Small rural hospitals have a lower neo-natal rate than do their big city counterparts, yet the federal health planners recently declared that hospitals delivering less than 500 infants a year were lacking in quality and efficiency.

Herman A. Hein, MD, of the University of Iowa Hospitals and Clinics, Iowa City, challenged the federal declaration with a detailed study of the actual results of care in his state's rural and urban hospitals.

His research reports in JAMA that small rural hospitals can do a first rate job of delivering babies safely and at less cost than the big city hospitals.

Because high risk expectant mothers were screened out in advance and sent to specialized urban centers, Dr Hein found the small rural hospitals to have a much lower neo-natal death rate and the average base charges for obstetric services were lower.

In Iowa, Dr Hein reports, care is provided for some 42,000 maternity patients per year in 135 hospitals, 82 per cent of which deliver fewer than 500 babies per year. Some 42.5 per cent of all births in Iowa occurred in the small hospitals.

The most recent neonatal mortality in these hospitals is considerably less than the statewide rate of nine deaths per 1,000 births and has been as low as six per 1,000 births in the smallest hospitals for the past two years, he writes.

Most deliveries in small hospitals were attended by family practitioners, rather than specialists in obstetrics. Virtually all of the specialists practiced in communities of 25,000 people or more. But most of the deliveries in the small hospitals were in communities of less than 25,000.

Average delivery room charges for the Iowa hospitals increased with the size of the hospital, from \$57.19 for those under 100 beds to \$158.57 for those of 1,000 or more beds.

Dr Hein based the success of the Iowa program on regional perinatal programs which emphasized screening and early referral of high risk patients.

The majority of the high risk patients were delivered in the larger maternity services, where perinatal care centers had been established. Thus the larger services had a higher

death rate, because they were handling most of the difficult deliveries.

"We believe that the medical services should be provided as close to the patient's home as possible if the quality of care is not compromised and the services offered at reasonable cost. Time and distance factors imposed by consolidation of services would substantially alter the accessibility of maternity services for pregnant women," Dr Hein concluded. □

OSMA Labels Second Opinion Program Ineffective

The Department of Health, Education and Welfare second opinion program uproar has quieted to a dim purr. In a short life span of five weeks, it has received a low key approach from the Oklahoma media and produced only three formal requests.

HEW enjoyed a great deal of attention in the Texas media; apparently, the effectiveness has been the same. It is the OSMA's understanding that only 18 requests for a second opinion have been sought.

The program, designed to encourage patients to obtain second opinions on recommended surgical care, has not proved as successful as HEW officials and several insurance agencies had hoped. Designers did not take into consideration the established doctor-patient mechanism where the physician often acquired a colleague's opinion without cost to the patient, and the fact that other existing mechanisms already provide for second opinions.

The OSMA Board of Trustees agreed to cooperate with the HEW program as long as the patient was not penalized for not having or rejecting a second opinion, and as long as it followed established medical guidelines. Some private insurance companies had proposed special panels to deal with second opinion requirements. The OSMA, however, favored the patient's freedom to select opinions at random, and since, these panels have been done away with.

Under the present system, the patient contacts Aetna Medicare, pertinent information is referred to the OSMA and requests are handled either by OSMA or by the Oklahoma and Tulsa County Medical Societies. In either case the patient is referred to three physicians.

The program, originally designed to cut down on so called "unnecessary surgeries," is apparently becoming dispensable. □

AMA Witnesses Criticize NHI

American Medical Association witnesses told the Senate Human Resources Subcommittee on Health that the National Health Insurance Plan would result in a "federal takeover" of the health care system.

Dr James H. Sammons, executive vice-president and Dr William C. Felch, chairman of the Council on Legislation commented that NHI would "not be in the interest of the citizens of this country."

HEW Secretary Joseph Califano joined them in criticizing Senator Edward Kennedy and organized labor proposal.

Califano said the plan would be too costly, pointing to the \$30.8 billion it would add to the federal budget by 1983 and that any program "must be phased in with singular care and sensitivity to the economy, governmental budget, and the administrative complexity of the health care system."

The AMA testimony was marked by sharp exchanges with Kennedy.

The senator complained about the statement that his bill would lead to a federal takeover and the AMA's assertion that his bill would result in health care rationing.

Dr Felch responded, "The total federal takeover of the health care system is inescapable under this program. This result is undesirable . . . We do not think the American public will want its health care directed and controlled by the federal government. The history of federally run programs does not instill such trust and confidence as to support such action."

When fixed budgets and ceilings are established, coupled with increased demand, Dr Sammons said there will be people who do not receive services.

Both AMA witnesses and Califano commented on the sketchy nature of the Kennedy-labor proposal. Dr Felch recommended that a complete bill be drawn up to completely inform the public with sufficient details. □

Additional Dialysis Center Identified

The Journal has been informed of an additional dialysis center by the Kidney Foundation of Oklahoma. The following center was not named with the group of centers recently published: Jal S. Chawla, MD, St. Mary's Hospital, 305 South Fifth Street, Enid, Oklahoma 73701, 405/232-6100. □



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HEW ICD-9-CM Endorsement Arouses Adverse Reaction

Strong objections to HEW's endorsement of the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) are mounting in the American Medical Association.

Effective January 1979, Health Care Financing Administration and Public Health Service expects this new system to be used to coordinate statistics on health problems and health care in hospitals and similar institutional environments.

The potential impact on the AMA's Current Procedural Terminology program has aroused a strong and mounting adverse reaction throughout the Federation. The opposition is directed at the ICD-9-CM mandated use in reporting medical services and procedures for governmentally funded health care programs.

The AMA strongly urges physicians to continue utilization of CPT-4 for reporting these procedures and services to all third-party intermediaries. The law firm of Sidley and Austin has been retained to take action necessary to protect the rights of the profession and the AMA's interest in CPT.

ICD-9-CM is based upon the International Classification of Diseases, Ninth Revision which is published by the World Health Organization and which will supersede the earlier edition, ICD-8. The Commission on Professional and Hospital Activities (CPHA) intends to enhance statistical reporting capabilities particularly with respect to diagnoses.

In an apparent concern over its loss of control of the ICD-9-CM publication to the Commission on Professional and Hospital Activities, HEW entered into an agreement with CPHA to permit extinguishment of the copyright after a certain period of time in return for which ICD-9-CM would be mandated for use in governmentally financed health care programs.

Specifically, it is the AMA's current understanding that ICD-9-CM is not required in the reporting of services and procedures performed by physicians and secondly, that ICD-9-CM is not mandated for use in ambulatory care settings including physician offices.

The three volumes of ICD-9-CM contain codes and nomenclature for diagnoses and approximately 3,000 codes and descriptions for medical

procedures. The procedure descriptions are not a replacement for Physicians CPT.

AMA discussions continue with HEW directed at endorsement of CPT-4 as the principal reporting mechanism for physicians services under federally supported programs. □

Medicare Deductibles Increase With 1979 Benefit Periods

An amendment of the Social Security Act Section 1813(b) (2) requires the HEW secretary to make an annual review of hospital insurance costs under Medicare, and to adjust the deductible and related coinsurance amounts for the following calendar year.

The formula in the law requires that the deductible be based on \$40 times the ratio between the average per diem hospital cost for insured persons under the program in 1977 and the corresponding average in 1966, rounded to the nearest multiple of \$4.

Interim cost averages for these two years were \$155.26 and \$37.92 respectively. The ratio of final costs to interim costs has been calculated as approximately 1.035 for 1977 and 1.055 for 1966. Thus, the inpatient hospital deductible is $\$40 \times (\$155.26 \times 1.035) / \$37.92 \times 1.055 = \160.67 , which is rounded to \$160.

The law also specifies that coinsurance amounts must be proportionate to the inpatient hospital deductible. Thus, for benefit periods starting in calendar year 1979, the deductible amount for the first 60 days of inpatient hospital care will be \$160.

Hospital coinsurance amounts for the 61st through the 90th day of each benefit period will be \$40 a day which is one-fourth of the deductible. The hospital coinsurance amount for lifetime reserve days used will be \$80 a day which is one-half of the deductible.

For the 21st through 100th day of services in a skilled nursing facility, the coinsurance amount for benefit periods starting in calendar year 1979 will be \$20 a day, an eighth of the deductible.

The new amounts are effective only with benefit periods starting in calendar year 1979. The current \$144 inpatient hospital deductible and related coinsurance amounts remain in effect for benefit periods which start in calendar year 1978, even though the benefit period may extend into 1979. □

AMA Approves Budget, Emphasizes Science

Six programs of the AMA anticipate funding from the \$62,525,000 approved by the Board of Trustees for the 1979 fiscal year budget.

Based on expected expenses of \$55,459,000, spending during the fiscal year ending November 30, 1979, will be spread among the six missions: Scientific Policy and Information, \$20,077,000; Assure and Continue to Improve the Quality of Medical Care, \$9,508,000; Represent the Medical Profession, \$7,960,000; Internal Support Service, \$7,117,000; Strengthen Organized Medicine, \$5,800,000; and Promote the Effective Delivery of Care, \$3,820,000.

The balance will enable the AMA to place \$7,066,000 in reserve, in accordance with a policy set by the House of Delegates at the 1975 Annual Convention. Liquid reserves were used in 1978 to pay \$9.2 million in taxes on unrelated business income.

Revenue for the 1979 budget is expected to come largely from membership dues, \$38,385,000 and advertising, \$11,800,000. Other sources of revenue are estimated at \$3,18,000 from royalties; \$2,988,000 from accreditation, contracts and educational programs; \$2,264,000 from subscriptions; \$885,000 from books and pamphlets sales; and \$3,023,000 from investments and other income.

The 1979 budget will emphasize scientific programs. □

OSHA Access Proposal Threatens Privacy

Dr James Sammons, AMA executive vice-president, says the Occupational Safety and Health Administration has gone too far with the proposed rule of "Access to Employee Exposure and Medical Records."

OSHA requires that each employer keep a daily log of on-the-job injuries or job-related health problems of all employees. It is aimed at guarding employees against undue exposure to health hazards in the working place and is summarized in an annual report at the end of the year.

The proposal would present a threat to the privacy of the medical records of American working people and open the health record to government inspection, charges the AMA official.

He says this would work to the disadvantage

of the worker, who might withhold vital medical data if he or she knew the records would be open to reading by outside parties.

"The confidentiality of patient-physician communications is an essential element in the provision of good medical care. It helps to ensure free and open disclosure by the patient to the physician of all information needed for proper diagnosis and treatment. Thus, preservation of a person's expectations of confidentiality is in the best medical interests of the patient," Dr Sammons said.

The AMA recognizes the need to retain and to provide appropriate access to pertinent data relating to exposure of employees to hazardous materials in the workplace, but the employee has a right to expect that information collected by others on his behalf would remain confidential.

Occupational health records often contain personal data that is unrelated to work. Records include notation of emotional and mental illness, abortion, venereal diseases and private family matters says the AMA official.

Dr Sammons takes an adamant view on the confidentiality between the worker and the occupational physician. □

Society Reschedules Wyoming Meeting

The Rocky Mountain Neurosurgical Society will meet during the week of June 13-17, 1979, for the Fourteenth Annual Meeting.

President Michael McNally, MD, will preside over the gathering at the Jackson Lake Lodge, Jackson Hole, Wyoming.

For more information, contact Ralph J. Kaplan, MD, secretary at the University of Oklahoma Health Sciences Center, P.O. Box 25606, Oklahoma City, Oklahoma 73125. □

Remember these dates . . .

MAY 3 - 5, 1978

OKLAHOMA STATE MEDICAL
ASSOCIATION ANNUAL MEETING

Williams Plaza Center 3rd and Boston
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DEATHS

CARL J. HOTZ, MD 1902-1978

Carl J. Hotz, MD, 75, a Tulsa general surgeon, died September 11, 1978. Born in Marissa, Illinois, Dr Hotz was graduated from the University of Illinois College of Medicine in 1928. His practice was established in Tulsa in 1932, where he remained active until 1971.

Dr Hotz was honored by the Tulsa County Medical Society Auxiliary in 1972 when he was named Doctor of the Year. The same year he was awarded a Life Membership in the OSMA. A Fellow of the American College of Surgeons, he was also a member of the International College of Surgeons, the Southwestern Surgical Congress, the Southern Medical Society and the Tulsa Surgical Society.

E. D. PADBERG, MD 1912-1978

An Ada internist, E. D. Padberg, MD, died October 8, 1978. Born in Dallas City, Illinois, Dr Padberg, 66, received his medical degree from the University of Oklahoma College of Medicine in 1940. He had practiced in Ada since that time except for his service with the Air Force during World War II. He was a member of the Phi Beta Pi.

ROBERT B. GIBSON, MD 1889-1978

Robert B. Gibson, MD, retired, Ponca City general practitioner, died October 14, 1978. A 1915 graduate of the University of Oklahoma College of Medicine, Dr Gibson had practiced in the Ponca City community for over 50 years before his retirement. He was a member of the American College of Surgeons, the International College of Surgeons and the Southwest Surgical Conference. Dr Gibson was a Life Member of the OSMA.

W. DAVID STUART, MD 1922-1978

A prominent Oklahoma City otolaryngologist, W. David Stuart, MD, died October 23, 1978. A native of Valdez, Alaska, Dr Stuart was graduated from the University of Washington School of Medicine. Following ten years of general practice in California, he came to Oklahoma City where he completed his specialty work in otolaryngology. At the time of his death he was clinical assistant professor at the University of Oklahoma Health Sciences Center. He was a founding member and current chairman of the Oklahoma Commission of the Deaf and Hearing Impaired.

Among his medical affiliations were the American Council of Otolaryngology, American Academy of Otolaryngology, American College of Surgeons and Southern Medical Association.

ARNOLD H. UNGERMAN, MD 1909-1978

A well-known Tulsa neuropsychiatrist, Arnold H. Ungerman, MD, 69, died October 16, 1978. A native of Leavenworth, Kansas, Dr Ungerman moved to Tulsa in 1928. He was graduated from University of Oklahoma College of Medicine in 1934. Active in many medical and civic organizations, Dr Ungerman was a Fellow of the American Psychiatric Foundation, a past-president of the Tulsa Society of Neurologists, Psychologists and Neurosurgeons and a member of the World Mental Health Organization and American Geriatric Society.

O. E. LAYTON, MD 1907-1978

O. E. Layton, MD, 71, long-time Collinsville physician, died in October. A native of Cleveland, Oklahoma, Dr Layton was graduated from the University of Oklahoma College of Medicine in 1937. His practice was established in Collinsville where he continued his general practice career for over 40 years. □

Book Review

CEREBRAL ARTERIAL DISEASE, edited by R. W. Ross Russell, Churchill Livingstone, New York, N.Y., 1976, 323 pages (\$30.00).

Significant strides have been made in understanding various aspects of cerebrovascular disease. In particular, advances have been made in diagnostic methods for the investigation of cerebrovascular accidents. Unfortunately, therapy has not kept pace with diagnosis. The author emphasizes this in his preface to the book.

The author assembled a significant number of well-known contributors from the British Isles, Europe and the United States. The book contains 14 chapters and ranges from the epidemiology and natural history and prognosis of cerebrovascular disease through the clinical and pathologic aspects of strokes to the rehabilitation of patients who have sustained cerebral vascular accidents. The last chapter by Dr Russell entitled "Less Common Varieties of Cerebral Arterial Disease" is particularly good.

Generally speaking the authors are conservative and cautious, and critically assess the current state of diagnosis and management of such disorders. Anyone interested in cerebral vascular disease will find this monograph valuable. ☐

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Miscellaneous Advertisements

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SITE OF THE OSMA ANNUAL MEETING



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MAY 3 - 5, 1979

INDEX TO CONTENTS

The use of this index will be greatly facilitated by remembering that articles are often listed under more than one heading. Scientific articles may be found under the name of the author and the name of the article as well as under listing of authors and scientific articles. Editorial and deaths are listed under the special headings as well as alphabetically.

Pages Included in Each Issue

January	1-40	July	277-306
February	41-77	August	307-340
March	79-113	September	341-376
April	115-151	October	377-408
May	153-192	November	411-449
June	195-276	December	451-489

Key to Abbreviations

(S)—Scientific	(D)—Deaths
(E)—Editorial	(Pic)—Pictures
(SA)—Special Articles	(GN)—General News
(HM) History of Medicine	

A

Abandon Radical Mastectomy For Breast Cancer, Experts Say (GN)	209
Additional Dialysis Center Identified (GN)	485
Address By The Honorable David L. Boren, Governor, State of Oklahoma (GN)	293
Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma, Self, Jane, MD, White, Robert S., MD, and King, James, MD (S)	165
Aims and Goals of a Department of Medicine, Paper, Solomon, MD (S)	317
Albers, Donald D., MD, and Barnes, William F., MD, Comparison of Paired Midstream Voided and Catheterized Urine Samples From Female Patients in a General Hospital (S)	82
Allgood, John M., MD (D)	148
AMA Approves Budget, Emphasizes Science (GN)	487
AMA Approves PR Resolution (GN)	38
AMA Meetings Set (GN)	369
AMA Position on Bacche (GN)	331
AMA Sues Over Physician Lists (GN)	209
AMA Winter Scientific Meeting To Be Held December 7-10 in Las Vegas (GN)	440
AMA Witnesses Criticize NHI (GN)	485
Anatomia Animata: Visceral Reflexes, Lachman, Ernest, MD (E)	41
Anh, Nong The, MD, and Hammarsten, James F., MD, The Vietnamese Emigre Physicians in Oklahoma From 1975 to 1977 — A Two-Year Report (S)	343
Antibiotic-Associated Colitis: Report of a Case, Long, C. I., DO, edited by Jerry B. Vannatta, MD (S)	457
Antibiotic-Associated or Toxin Mediated Colitis, A	

Unifying Hypothesis, Saadah, Hanna A., MD, and Esaki, Paul T., MD (S)	453
Antipsychotic Drugs — An Update, Charalampous, K. D., MD, and Keepers, G. A., MD (S)	6
Arkansas-Oklahoma Cancer Forum Scheduled in Fort Smith (GN)	371
Aversano, Thomas, MD, Prolapsing Mitral Leaflet Syndrome (S)	418
Awakening of a New Minority, Winbray, David D. (SA)	358

Annual Meeting

Exhibitors	142
Ladies Activities	144
Meeting Digest	133
1978 County Medical Society Officers	144
Oklahoma Medical Summit '78	133
Program	135

Authors

Albers, Donald D., MD, and Barnes, William F., MD, Comparison of Paired Midstream Voided and Catheterized Urine Samples From Female Patients in a General Hospital (S)	82
Anh, Nong The, MD, and Hammarsten, James F., MD, The Vietnamese Emigre Physicians in Oklahoma From 1975 to 1977 — A Two-Year Report (S)	343
Aversano, Thomas, MD, Prolapsing Mitral Leaflet Syndrome (S)	418
Bailey, David M., The Rise and Fall of Albert Abrams, AM, MD, FRMS (HM)	15
Barnes, William F., MD, and Albers, Donald D., MD, Comparison of Paired Midstream Voided and Catheterized Urine Samples From Female Patients in a General Hospital (S)	82
Barnes, William F., MD, Isaacson, Richard N., MD, and Halverstadt, Donald B., MD, Complete Ureteral Substitution With Intestinal Segments (S)	413
Blair, Margaret Berry and Howard, R. Palmer, MD, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, I. Pressing Into The Territory (HM)	387
Blair, Margaret Berry and Howard, R. Palmer, MD, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, II. Saddlebags, Scalpel and Sheets (HM)	427
Blair, Margaret Berry and Howard, R. Palmer, MD, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, III. The Seminole Country (HM)	460
Block, Mary Frances, MD, McCaffree, Mary Anne, MD, and Kallenberger, David A., MD, Prevention of Meconium Aspiration Syndrome in Newborn Infants (S)	202
Boyd, Wallace N., MPH, and Deliere, Harry M., DrPH, A Case For A Positive Public Relations Program in Hospitals (S)	122
Bretza, Joseph MD, Lipoatrophic Diabetes With Aortic Insufficiency (S)	351
Bryant, Charles E., MD, Salicylate-Induced Hepatotoxicity: A Review (S)	284
Charalampous, K. D., MD, and Keepers, G. A., MD,	

Antipsychotic Drugs — An Update (S)	6
Crosby, Warren M., MD, and Jimerson, Steven D., MD, Maternal Mortality in Oklahoma, Hemorrhage Remains a Problem (S)	197
Daniel, H. Grady, MD, and Wilson, Don A., MD, Ultrasound Evaluation of Pancreatic Disease — The State of the Art (S)	379
Deliere, Harry M., DrPH, and Boyd, Wallace N., MPH, A Case For A Positive Public Relations Program in Hospitals (S)	122
Deliere, Harry M., DrPH, and Herron, Tom, MPH, Impact of the Day of Admission on Length of Stay in a Community General Hospital (S)	158
Downham, William H., MD, Roswell, Robert H., MD, Mohr, John A., MD, and Griffiths, William, MD, Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneumonia (S)	3
Esaki, Paul T., MD, and Saadah, Hanna A., MD, Antibiotic-Associated or Toxin Mediated Colitis, A Unifying Hypothesis (S)	453
Fred, Herbert L., MD, Press Box Vision (E)	153
Galloway, Dan C., MD, and Phillips, William G., MD, Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head (S)	47
Godkins, Thomas R., PA, Woerth, Janice, MPH, and Hill, Robert F., PhD, Physicians Who Employ Physicians Assistants: Results of a Survey (S) ...	279
Grana, William A., MD, Moretz, III, Alfred, MD, and Rashkin, Alan, MD, Oklahoma High School Football Injury Study: A Preliminary Report (S) ...	85
Griffiths, William, MD, Downham, William H., MD, Roswell, Robert H., MD, and Mohr, John A., MD, Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneumonia (S)	3
Groom, Dale, MD, Courtroom Capers (E)	1
Halverstadt, Donald B., MD, Barnes, William F., MD, and Isaacson, Richard N., MD, Complete Ureteral Substitution With Intestinal Segments (S)	413
Hammarsten, James L., MD, and Anh, Nong The, MD, The Vietnamese Emigre Physicians in Oklahoma From 1975 to 1977 — A Two-Year Report (S)	343
Herron, Tom, MPH, and Deliere, Harry M., DrPH, Impact of the Day of Admission on Length of Stay in a Community General Hospital (S)	158
Hill, Robert F., PhD, Godkins, Thomas R., PA, and Woerth, Janice, MPH, Physicians Who Employ Physicians Assistants: Results of a Survey (S) ...	279
Howard, R. Palmer, MD, and Blair, Margaret Berry, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, I. Pressing Into The Territory (HM)	387
Howard, R. Palmer, MD, and Blair, Margaret Berry, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, II. Saddlebags, Scalpel and Sheets. (HM)	427
Howard, R. Palmer, MD, and Blair, Margaret Berry, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, III. The Seminole Country (HM)	460
Isaacson, Richard N., MD, Halverstadt, Donald B., MD, and Barnes, William F., MD, Complete	

Ureteral Substitution With Intestinal Segments (S)	413
Jimerson, Steven D., MD, and Crosby, Warren M., MD, Maternal Mortality in Oklahoma, Hemorrhage Remains a Problem (S)	197
Jordan, F. B., MD, Prouty, R. W., BS, DABFT, and Luckstead, E. F., MD, Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing" (S)	117
Kallenberger, David A., MD, Block, Mary Frances, MD, and McCaffree, Mary Anne, MD, Prevention of Meconium Aspiration Syndrome in Newborn Infants (S)	202
Keepers, G. A., MD, and Charalampous, K. D., MD, Antipsychotic Drugs — An Update (S)	6
Kem, David C., MD, and Males, James L., MD, Concurrent Hyperthyroidism and Hyperparathyroidism—Report of Two Cases (S)	382
King, James, MD, Self, Jane, MD, and White, Robert S., MD, Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma (S)	165
Lachman, Ernest, MD, Anatomia Animata: Visceral Reflexes, (E)	41
Lachman, Ernest, MD, Physician, Educator, Anatomist and Mass Murderer (SA)	354
Lachman, Ernest, MD, "Publish or Perish" (E)	79
Landgarten, Steven, MD, and Soper, Michael L., MD, Hypercalcemia Corrected By Orchiectomy In A Patient With Carcinoma of the Prostate (S) ...	288
Lewis, James E., PhD, and Thompson, C. Thomas, MD, FACS, Emergency Medical Services as a Model For Rural Health Care Delivery (SA)	26
Lewis, Jr., C. S., MD, FACP, Physician Manpower in Oklahoma in 1978 (SA)	468
Long, C. I., DO, edited by Jerry B. Vannatta, MD, Antibiotic-Associated Colitis: Report of a Case (S) ...	457
Luckstead, E. F., MD, Jordan, F. B., MD, and Prouty, R. W., BS, DABFT, Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing" (S)	117
Males, James L., MD, and Kem, David C., MD, Concurrent Hyperthyroidism and Hyperparathyroidism—Report of Two Cases (S)	382
Males, James L., MD, Pituitary Disease: The Endocrinologist's View (S)	311
McCaffree, Mary Anne, MD, Kallenberger, David A., MD, and Block, Mary Frances, MD, Prevention of Meconium Aspiration Syndrome in Newborn Infants (S)	202
McCaffree, Mary Anne, MD, Neonatal Transport, 1976 (S)	10
Mohr, John A., MD, Griffiths, William, MD, Downham, William H., MD, and Roswell, Robert H., MD, Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneumonia (S)	3
Moretz, III, MD, Alfred, Rashkin, Alan, MD, and Grana, William A., MD, Oklahoma High School Football Injury Study: A Preliminary Report (S) ...	85
Neal, Jacquelyn, Sexton, Daniel J., MD, and Smith, David L., MD, Newer Antibiotics (S)	155
Papper, Solomon, MD, Aims and Goals of a Department of Medicine (S)	317
Phillips, William G., MD, and Galloway, Dan C., MD, Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head (S)	47
Prouty, R. W., BS, DABFT, Luckstead, E. F., MD, and Jordan, F. B., MD, Sudden Death Following	

Fluorohydrocarbon Aerosol "Sniffing" (S)	117
Ramadan, Tawfik Z., MD, Sexauer, Charles L., MD, and Wenzl, James E., MD, Favism in Oklahoma (S)	91
Rashkin, Alan, MD, Grana, William A., MD, and Moretz, III, Alfred, MD, Oklahoma High School Football Injury Study: A Preliminary Report (S)	85
Roswell, Robert H., MD, Mohr, John A., MD, Grif- fiths, William, MD, and Downham, William H., MD, Development of Ampicillin-Resistance Dur- ing Treatment of Haemophilus Influenzae Pneumonia (S)	3
Rutledge, B. J., MD, Introduction to Microsurgery (S)	309
Saadah, Hanna A., MD, and Esaki, Paul T., MD, Antibiotic-Associated or Toxin Mediated Colitis, A Unifying Hypothesis (S)	453
Self, Jane, MD, White, Robert S., MD, and King, James, MD, Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma (S)	165
Sexauer, Charles L., MD, Wenzl, James E., MD, and Ramadan, Tawfik Z., MD, Favism in Oklahoma (S)	91
Sexton, Daniel J., MD, Smith, David L., MD, and Neal, Jacquelyn, Newer Antibiotics (S)	155
Smith, David L., MD, Neal, Jacquelyn, and Sexton, Daniel J., MD, Newer Antibiotics (S)	155
Soper, Michael L., MD, and Landgarten, Steven, MD, Hypercalcemia Corrected By Orchiectomy In A Patient With Carcinoma of the Prostate (S) ...	288
Sullivan, J. Andy, MD, and Tompkins, S. Fulton, MD, Development of a Scoliosis Screening Pro- gram in Oklahoma Schools (S)	52
Thompson, C. Thomas, MD, FACS, and Lewis, James E., PhD, Emergency Medical Services as a Model For Rural Health Care Delivery (SA)	26
Tompkins, S. Fulton, MD, and Sullivan, J. Andy, MD, Development of a Scoliosis Screening Pro- gram in Oklahoma Schools (S)	52
Vannatta, Jerry B., MD, (edited by) and Long, C. I., DO, Antibiotic-Associated Colitis: Report of a Case (S) ..	457
Wenzl, James E., MD, Ramadan, Tawfik Z., MD, and Sexauer, Charles L., MD, Favism in Oklahoma (S)	91
White, Robert S., MD, King, James, MD, and Self, Jane, MD, Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma (S)	165
Wilder, Robert J., MD, Emergency Medicine — An Emerging Specialty (S)	120
Wilson, Don A., MD, and Daniel, H. Grady, MD, Ultrasound Evaluation of Pancreatic Disease — The State of the Art (S)	379
Winbray, David D., Awakening of a New Minority (SA)	358
Woerth, Janice, MPH, Hill, Robert F., PhD, and Godkins, Thomas R., PA, Physicians Who Em- ploy Physicians Assistants: Results of a Survey (S)	279

B

Bailey, David M., The Rise and Fall of Albert Abrams, AM, MD, FRMS (HM)	15
Barnes, William F., MD, and Albers, Donald D., MD,	

Comparison of Paired Midstream Voided and Catheterized Urine Samples From Female Pa- tients in a General Hospital (S)	82
Barnes, William F., MD, Isaacson, Richard N., MD, and Halverstadt, Donald B., MD, Complete Ure- teral Substitution With Intestinal Segments (S) ..	413
Bassett, Clifford M., MD (D)	40
Berry, Curtis, MD (D)	148
Bickham, David (Pic)	445
Blair, Margaret Berry and Howard, R. Palmer, MD, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, I. Pressing Into The Territory (HM)	387
Blair, Margaret Berry and Howard, R. Palmer, MD, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, II. Sad- dlebags, Scalpel and Sheets (HM)	427
Blair, Margaret Berry and Howard R. Palmer, MD, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, III. The Seminole Country (HM)	460
Block, Mary Frances, MD, McCaffree, Mary Anne, MD, and Kallenberger, David A., MD, Pre- vention of Meconium Aspiration Syndrome in Newborn Infants (S)	202
Book Reviews (GN) .76, 112, 150, 189, 305, 336, 374, 489	
Boyd, Wallace N., MPH, and Deliere, Harry M., DrPH, A Case For A Positive Public Relations Program in Hospitals (S)	122
Bretza, Joseph, MD, Lipoatrophic Diabetes With Aortic Insufficiency (S)	351
Bryant, Charles E., MD, Salicylate-Induced Hepatotoxicity: A Review (S)	284
Building Project On Again (GN)	105
Bynum, Mrs. Chester (Pic)	144

C

Calendar of Events (GN)	208
Cancer—Why the Crab? (GN)	66
Carter Seeks Controls; VE Decreases Cost (GN)	481
A Case For A Positive Public Relations Program in Hospitals, Deliere, Harry M., DrPH, and Boyd, Wallace N., MPH (S)	122
Charalampous, K. D., MD, and Keepers, G. A., MD, Antipsychotic Drugs — An Update (S)	6
CME ..(GN)	338, (Sept.) xi
CME Requirements Explained (GN)	366
Combs, Mrs. Leon D. (Pic)	144
Comparison of Paired Midstream Voided and Catheterized Urine Samples From Female Pa- tients in a General Hospital, Barnes, William F., MD, and Albers, Donald D., MD (S)	82
Complete Ureteral Substitution With Intestinal Segments, Barnes, William F., MD, Isaacson, Richard N., MD, and Halverstadt, Donald B., MD (S)	413
Concurrent Hyperthyroidism and Hyper- parathyroidism—Report of Two Cases, Males, James L., MD, and Kem, David C., MD (S)	382
Congressman Jim Jones (Pic)	35
Congressman Jones Appears at Tulsa Health Forum (GN)	35
Continuing Medical Education Programs (GN)	151
Correction (GN)	106
Cost Commission Calls for Changes in Health Care	

System (GN)	33
Cost Containment Panel Named (GN)	208
Course for Family Physicians Set (GN)	147
Court Holds Surgeon Accountable (GN)	31
Courtroom Capers, Groom, Dale, MD (E)	1
CPR Program Approved (GN)	32
Crosby, Warren M., MD, and Jimerson, Steven D., MD, Maternal Mortality in Oklahoma, Hemor- rhage Remains a Problem (S)	197

D

Damned or Divine? ..(E)	341
Daniel, H. Grady, MD, and Wilson, Don A., MD, Ultrasound Evaluation of Pancreatic Disease — The State of the Art (S)	379
Data on Sports Injuries To Be Collected (GN)	404
Dean of Tulsa Medical School Resigns (GN)	302
Delegates Retain Education Requirements (GN)	206
Deliere, Harry M., DrPH, and Boyd, Wallace N., MPH, A Case For A Positive Public Relations Program in Hospitals (S)	122
Deliere, Harry M., DrPH, and Herron, Tom, MPH, Impact of the Day of Admission on Length of Stay in a Community General Hospital (S)	158
Denyer, Hillard E., MD (Pic)	209
Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneu- monia, Griffiths, William, MD, Downham, Wil- liam H., MD, Roswell, Robert H., MD, and Mohr, John A., MD (S)	3
Development of a Scoliosis Screening Program in Oklahoma Schools, Sullivan, J. Andy, MD, and Tompkins, S. Fulton, MD (S)	52
Dialysis Centers Identified (GN)	304
Distinguished Service Award (GN)	39
Doctor Denyer Wins A. H. Robins Award (GN)	209
Doctor Leebron Urged As President-elect (GN)	109
Doctor Margo Named Vice-Chairman of Cost Con- tainment Panel (GN)	303
Doctor Margo New OSMA President (GN)	177
Doctor Welborn Recognized By Cancer Center (GN)	66
Downham, William H., MD, Roswell, Robert H., MD, Mohr, John A., MD, and Griffiths, William, MD, Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneumonia (S)	3
Drug Center to Open Analysis Laboratory (GN)	304

DEATHS

Allgood, John M., MD	148
Bassett, Clifford M., MD	40
Berry, Curtis, MD	148
Farr, Louise Kinkead, MD	69
Fite, William P., Sr., MD	148
Ford, Herman W., MD	180
Gibson, Robert B., MD	488
Hotz, Carl J., MD	488
Israel, Charles W., MD	180
Jobe, James P., MD	108
Kay, James R., MD	40
Kimball, George H., MD	445
Larrabee, Walter S., MD	108
Layton, O. E., MD	488
LeHew, John L., Jr., MD	69
Matt, John G., MD	108
McGrew, Edwin A., MD	40
Mussil, William M., MD	69

Padberg, E. D., MD	488
Park, Felix R., MD	180
Reichmann, Ruth S., MD	445
Stuart, W. David, MD	488
Ungerman, Arnold H., MD	488

E

Emergency Medical Seminar To Be Held in Tulsa (GN)	36
Emergency Medical Services as a Model For Rural Health Care Delivery, Thompson, C. Thomas, MD, FACS, and Lewis, James E., PhD (SA)	26
Emergency Medicine — An Emerging Specialty, Wilder, Robert J., MD (S)	120
Emergency Medicine Conference Scheduled (GN)	145
Esaki, Paul T., MD, and Saadah, Hanna A., MD, Antibiotic-Associated or Toxin Mediated Colitis, A Unifying Hypothesis (S)	453
Executive Committee Put Temporary Hold on Build- ing Project (GN)	63

EDITORIALS

Anatomia Animata: Visceral Reflexes, Lachman, Ernest, MD	41
Courtroom Capers, Groom, Dale, MD	1
Damned or Divine?	341
Let's Don't Negotiate	377
Lying With Figures	411
Mistaken Identity	451
More Fever	277
On Playing Doctor	153
Present For Duty, Sir!	115
President's Page	2, 46, 81, 116, 154, 196, 278, 308, 342, 378, 412, 452
Press Box Vision, Fred, Herbert L., MD	153
"Publish or Perish", Lachman, Ernest, MD	79
Summer Shorts	195
Thermography — A Negative Appraisal	307

F

Farr, Louise Kinkead, MD ..(D)	69
Favism in Oklahoma, Ramadan, Tawfik Z., MD, Sexauer, Charles L., MD, and Wenzl, James E., MD, (S)	91
Fite, William P., Sr., MD (D)	148
Ford, Herman W., MD ..(D)	180
Former Executive Director Dies (GN)	373
Forsythe, Mrs. John T. ..(Pic)	144
Fred, Herbert L., MD, Press Box Vision (E)	153
Free Health Educational Literature Available (GN)	336

G

Galloway, Dan C., MD, and Phillips, William G., MD, Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head (S)	47
General Medical Practice in The United Kingdom (GN)	37
Gibson, Robert B., MD (D)	488
Godber, Sir George (Pic)	97, 98
Godkins, Thomas R., PA, Woerth, Janice, MPH, and Hill, Robert F., PhD, Physicians Who Employ Physicians Assistants: Results of a Survey (S)	279
Governor Boren Announces Four Workers Com- pensation Judges (GN)	335
Grana, William A., MD, Moretz, III, Alfred, MD, and Rashkin, Alan, MD, Oklahoma High School	

Football Injury Study: A Preliminary Report (S)	85
Griffiths, William, MD, Downham, William H., MD, Roswell, Robert H., MD, and Mohr, John A., MD, Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneu- monia (S)	3
Groom, Dale, MD, Courtroom Capers (E)	1

H

Halverstadt, Donald B., MD, Barnes, William F., MD, and Isaacson, Richard N., MD, Complete Ureteral Substitution With Intestinal Segments (S)	413
Hammarsten, James L., MD, and Anh, Nong The, MD, The Vietnamese Emigre Physicians in Oklahoma From 1975 to 1977 — A Two-Year Report (S)	343
Health Costs Continue To Concern Public (GN)	408
Health Planning Guidelines Severely Criticized (GN)	111
Herron, Tom, MPH, and Deliere, Harry M., DrPH, Impact of the Day of Admission on Length of Stay in a Community General Hospital (S)	158
HEW ICD-9-CM Endorsement Arouses Adverse Reaction (GN)	486
HEW Launches Second Opinion Program (GN)	404
HEW to Initiate Second Opinion Program (GN)	302
Hill, Robert F., PhD., Godkins, Thomas R., PA, and Woerth, Janice, MPH, Physicians Who Employ Physicians Assistants: Results of a Survey (S)	279
Hotz, Carl J., MD (D)	488
Howard, R. Palmer, MD, and Blair, Margaret Berry, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, I. Pressing Into The Territory (HM)	287
Howard, R. Palmer, MD, and Blair, Margaret Berry, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD II. Saddle- bags, Scalpel and Sheets (HM)	427
Howard, R. Palmer, MD, and Blair, Margaret Berry, Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, III. The Seminole Country (HM)	460
Hypercalcemia Corrected By Orchiectomy In A Pa- tient With Carcinoma of the Prostate, Land- garten, Steven, MD, and Soper, Michael L., MD (S)	288

HISTORY OF MEDICINE

The Rise and Fall of Albert Abrams, AM, MD, FRMS, Bailey, David M.	15
Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, I. Pressing Into The Territory, Blair, Margaret Berry and Howard, R. Palmer, MD	387
Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, II. Sad- dlebags, Scalpel and Sheets, Blair, Margaret Berry and Howard, R. Palmer, MD (HM)	427
Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, III. The Seminole Country, Blair, Margaret Berry and Howard, R. Palmer, MD	460

I

Impact of the Day of Admission on Length of Stay in a Community General Hospital, Deliere, Harry M., DrPH and Herron, Tom, MPH (S)	158
Incumbents Usually Win. Here's Why (GN)	406
Index To Advertisers (GN) (Jan) xxxiv, (Feb) xxviii, (Mar) xxvi, (Apr) xxix, (May) xxviii, (June) xxi, (July) xxv, (Aug) xix, (Sept) xxx, (Oct) xxx, (Nov) xxx, (Dec.) xviii	
Interim Health Manpower Report Completed (GN)	71
Introduction to Microsurgery, Rutledge, B. J., MD (S)	309
Irvine, Dr Donald (Pic)	97, 99
Isaacson, Richard N., MD, Halverstadt, Donald B., MD, and Barnes, William F., MD, Complete Ureteral Substitution With Intestinal Segments (S)	43
Israel, Charles W., MD (D)	180

J

Jimerson, Steven D., MD, and Crosby, Warren M., MD, Maternal Mortality in Oklahoma, Hemor- rhage Remains a Problem (S)	197
Jobe, James P., MD (D)	108
Jordan, F. B., MD, Prouty, R. W., BS, DABFT, and Luckstead, E. F., MD, Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing" (S)	117
Journal Receives Sandoz Award (GN)	207
July Continuing Medical Education Offerings (GN)	xi

K

Kallenberger, David A., MD, Block, Mary Frances, MD, and McCaffree, Mary Anne, MD, Prevention of Meconium Aspiration Syndrome in Newborn Infants (S)	202
Kamp, George H., MD (Pic)	181
Kay, James R., MD (D)	40
Keepers, G. A., MD, and Charalampous, K. D., MD, Antipsychotic Drugs — An Update (S)	6
Kem, David C., MD, and Males, James L., MD, Con- current Hyperthyroidism and Hyperpara- thyroidism—Report of Two Cases (S)	382
Kimball, George H., MD (D)	445
Kimerer, Mrs. Neil B. (Pic)	144
King, James, MD, Self, Jane, MD, and White, Robert S., MD, Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma (S)	165

L

Lachman, Ernest, MD, Anatomia Animata: Visceral Reflexes (S)	41
Lachman, Ernest, MD, Physician, Educator, Anatomist and Mass Murderer (SA)	354
Lachman, Ernest, MD, "Publish or Perish" (E)	79
Landgarten, Steven, MD, and Soper, Michael L., MD, Hypercalcemia Corrected By Orchiectomy In A Patient With Carcinoma of the Prostate (S)	288
Larrabee, Walter S., MD (D)	108
Last Chance Diet Called Dangerous (GN)	335
The Last Word (GN) (Jan) xxxvi, (Feb) xxx, (Mar) xxviii, (Apr) xxx, (May) xxx, (June) xxii, (July) xxvi (Aug) xx, (Sept) xxxii, (Oct) xxxii, (Nov) xxxii, (Dec) xx	
Layton, O. E., MD (D)	488
Legal Briefs (GN)	108, 192, 372, 447
LeHew, John L., Jr., MD (D)	69
Let's Don't Negotiate (E)	377

Lewis, Dr. . .(Pic)	101, 103
Lewis, Jr., Dr C. S. . .(Pic)	97, 181
Lewis, Jr., C. S., MD, FACP, Physician Manpower in Oklahoma in 1978 (SA)	468
Lewis, James E., PhD, and Thompson, C. Thomas, MD, FACS, Emergency Medical Services as a Model For Rural Health Care Delivery (SA)	26
Lipoatrophic Diabetes With Aortic Insufficiency, Bretza, Joseph, MD (S)	351
Lord, Dr Peter (Pic)	101
Luckstead, E. F., MD, Jordan, F. B., MD, and Prouty, R. W., BS, DABFT, Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing" (S)	117
Lying With Figures (E)	411

M

Main Highway Closed (GN)	447
Majority of States Now Have HMO's (GN)	178
Males, James L., MD, and Kem, David C., MD, Con- current Hyperthyroidism and Hyperpara- thyroidism — Report of Two Cases (S)	382
Males, James L., MD, Pituitary Disease: The Endocrinologist's View (S)	311
Malpractice Suit Not Barred By Statute of Limita- tions (GN)	39
Maternal Mortality in Oklahoma, Hemorrhage Re- mains a Problem, Jimerson, Steven D., MD, and Crosby, Warren M., MD (S)	197
Matt, John G., MD (D)	108
McCaffree, Mary Anne, MD, Kallenberger, David A., MD, and Block, Mary Frances, MD, Preven- tion of Meconium Aspiration Syndrome in New- born Infants (S)	202
McCaffree, Mary Anne, MD, Neonatal Transport, 1976 (S)	10
McGrew, Edwin A., MD (D)	40
McIntyre, Mrs. Ray T. (Pic)	144
Medical Board Explains "Unprofessional Conduct" (GN)	146
Medical Doctors Claim Narrow Victory, 13-10 (GN)	481
Medical Examiner Cases Explained (GN)	444
Medical Examiner Enjoined From Performing Au- topsy (GN)	34
Medical Examiners Hold Two-Day Meeting (GN)	404
Medical News in 1977 (GN)	63
Medical School Enrollment Increases (GN)	65
Medical Supply and Demand (GN)	181
Medical Survey Being Conducted (GN)	405
Medicare Deductibles Increase With 1979 Benefit Periods (GN)	486
Medicare Opens Toll-Free Telephone Lines (GN)	304
Medicine: Technology in the Marketplace (GN)	210
Miscellaneous Advertisements (GN), (Jan xi, 77, 113, 150 (May) ix, 220, 306, 340, (Sept) xxi, 408, 449, (Dec) 489	
Mistaken Identity (E)	451
Mohr, John A., MD, Griffiths, William, MD, Down- ham, William H., MD, and Roswell, Robert H., MD, Development of Ampicillin-Resistance Dur- ing Treatment of Haemophilus Influenzae Pneumonia (S)	3
Mooney, Richard J. . .(Pic)	445
More Fever . .(E)	277
Moretz, III, Alfred, MD, Rashkin, Alan, MD, and Grana, William A., MD, Oklahoma High School Football Injury Study: A Preliminary Report (S)	85
Munding, Linus A., MD . .(Pic)	181

Mussil, William M., MD (D)	69
--------------------------------------	----

N

National Health Expenditures Identified (GN)	367
Neal, Jacquelyn, Sexton, Daniel J., MD, and Smith, David L., MD, Newer Antibiotics (S)	155
Neonatal Transport, 1976, McCaffree, Mary Anne, MD (S)	10
New AMA Delegate Appears Near (GN)	373
New OSMA Officers Elected (GN)	207
New Technique Stretches Shortened Human Fin- gers to Normal Length (GN)	336
Newer Antibiotics, Smith, David L., MD, Neal, Jac- quelyn, and Sexton, Daniel J., MD (S)	155
News From the Oklahoma State Department of Health (GN) . .25, 58, 95, 128, 168, 205, 290, 326, 362, 401, 435, 476	
95th Congress Blocks Carter's Priority Programs (GN)	483
1979 Annual Meeting Chairmen Appointed (GN)	207
No NHI This Year Predicts Talmadge (GN)	209

O

Oehlert, Mrs. William H. . .(Pic)	144
Oklahoma Doctors Named Officers of Surgical Group (GN)	332
Oklahoma High School Football Injury Study: A Pre- liminary Report, Moretz, III, Alfred, MD, Rash- kin, Alan, MD, and Grana, William A., MD (S)	85
The Oklahoma Industrial Recreation and Fitness Council (GN)	39
Oklahomans Queue Up — Study Britain's NHS, Part I (GN)	96
Oklahomans Queue Up — Study Britain's NHS — Part II (GN)	169
OMPAC Elects New Officers (GN)	218
OMPAC Spends Money Wisely (GN)	402
On Playing Doctor (E)	153
ORU Hospital Application Ruled Incomplete (GN)	38
OSHA Access Proposal Threatens Privacy (GN)	487
OSMA Against Change in Medical Ethics (GN)	479
OSMA Cost Containment Effort Recognized (GN)	445
OSMA Encourages End of AMA NHI Bill (GN)	402
OSMA Honors Two Tulsa Physicians (GN)	181
OSMA Labels Second Opinion Program Ineffective (GN)	484
OSMA Officers Address Cost Question (GN)	439
Our Federation: Stronger Than Ever (GN)	327
OURS Takes Lead At VE Conference (GN)	480

P

Padberg, E. D., MD (D)	488
Papper, Solomon, MD, Aims and Goals of A Depart- ment of Medicine (S)	317
Park, Felix, MD (D)	180
Pharmacists Oppose HMO's (GN)	332
Phillips, William G., MD, and Galloway, Dan C., MD, Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head (S)	47
Physician Comment Sought on Changes in Ethics Code (GN)	67, 334
Physician, Educator, Anatomist and Mass Mur- derer, Lachman, Ernest, MD (SA)	354
Physician Manpower Improvement Cited (GN)	208
Physician Manpower in Oklahoma in 1978, Lewis, Jr., C. S., MD, FACP (SA)	468

Physicians Not Protected Under Worker's Compensation (GN)	110
Physicians Who Employ Physicians Assistants: Results of a Survey, Woerth, Janice, MPH, Hill, Robert F., PhD, and Godkins, Thomas R., PA (S)	279
Pituitary Disease: The Endocrinologist's View, Males, James L., MD (S)	311
Policy on Interest Charges Clarified (GN)	364
Position on Physician Extenders Studied (GN)	442
PRA Recipients Named (GN)	70
Present For Duty, Sir! (E)	115
President's Page (E)	2, 46, 81, 116, 154, 196, 278, 308, 342, 378, 412, 452
Press Box Vision, Fred, Herbert L., MD (E)	153
Prevention of Meconium Aspiration Syndrome in Newborn Infants, Kallenberger, David A., MD, Block, Mary Frances, MD, and McCaffree, Mary Anne, MD (S)	202
Proceedings of the 72nd Annual Session of the House of Delegates of the Oklahoma State Medical Association (GN)	221
Prolapsing Mitral Leaflet Syndrome, Aversano, Thomas, MD (S)	418
Prouty, R. W., BS, DABFT, Luckstead, E. F., MD, and Jordan, F. B., MD, Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing" (S)	117
PSRO Contract Signed (GN)	176
"Publish or Perish," Lachman, Ernest, MD (E)	79
Pulmonary Disease Conference Scheduled for June (GN)	174

R

Ramadan, Tawfik Z., MD, Sexauer, Charles L., MD, and Wenzl, James E., MD, Favism in Oklahoma (S)	91
Rashkin, Alan, MD, Grana, William A., MD, and Moretz, III, Alfred, MD, Oklahoma High School Football Injury Study: A Preliminary Report (S) ...	85
Reichmann, Ruth S., MD (D)	445
The Rise and Fall of Albert Abrams, AM, MD, FRMS, Bailey, David M. (HM)	15
Residency Positions Finally Equal Graduates (GN) ...	402
Roswell, Robert H., MD, Mohr, John A., MD, Griffiths, William, MD, and Downham, William H., MD, Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneumonia (S)	3
Rural Hospitals Found Safe For Delivering Babies (GN)	484
Rutledge, B. J., MD, Introduction to Microsurgery (S)	309

S

Saadah, Hanna A., MD, and Esaki, Paul T., MD, Antibiotic-Associated or Toxin Mediated Colitis, A Unifying Hypothesis (S)	453
Salicylate-Induced Hepatotoxicity: A Review, Bryant, Charles E., MD (S)	284
Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, I. Pressing Into The Territory, Blair, Margaret Berry and Howard, R. Palmer, MD (HM)	387
Scalpel In A Saddlebag: The Story of a Physician in Indian Territory; Virgil Berry, MD, II. Sad-	

dlebags, Scalpel and Sheets, Blair, Margaret Berry and Howard, R. Palmer, MD (HM)	427
Scalpel In A Saddlebag: The Story of a Physician in Indian Territory: Virgil Berry, MD, III. The Seminole Country, Blair, Margaret Berry and Howard, R. Palmer, MD (HM)	460
Self, Jane, MD, White, Robert S., MD, and King, James, MD, Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma (S)	165
Services for Oklahoma Poison Control Center Expanded (GN)	304
Sethney, Walter F., MD (Pic)	181
Sexauer, Charles L., MD, Wenzl, James E., MD, and Ramadan, Tawfik Z., MD, Favism in Oklahoma (S)	91
Sexton, Daniel J., MD, Smith, David L., MD, and Neal, Jacquelyn, Newer Antibiotics (S)	155
Smith, David L., MD, Neal, Jacquelyn, and Sexton, Daniel J., MD, Newer Antibiotics (S)	155
Socialized Medicine in England Accepting US Business Role in British Health Care (GN)	371
Society Reschedules Wyoming Meeting (GN)	487
Soper, Michael L., MD, and Landgarten, Steven, MD, Hypercalcemia Corrected By Orchiectomy In A Patient With Carcinoma of the Prostate (S) ...	288
St Francis Diabetes Center Offers Symposium (GN) ...	66
State Commission Awards Rural Medicine Scholarships (GN)	369
Stuart, W. David, MD (D)	488
Study Shows Fewer Recalls For Firms Committed to Research (GN)	370
Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing," Luckstead, E. F., MD, Jordan, F. B., MD, and Prouty, R. W., BS, DABFT (S) ...	117
Sullivan, J. Andy, MD, and Tompkins, S. Fulton, MD, Development of a Scoliosis Screening Program in Oklahoma Schools (S)	52
Summer Shorts (E)	195

Scientifics

Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma, Self, Jane, MD, White, Robert S., MD, and King, James, MD	165
Aims and Goals of A Department of Medicine, Papper, Solomon, MD	317
Antibiotic-Associated Colitis: Report of a Case, Long, C. I., DO, edited by Jerry B. Vannatta, MD ...	457
Antibiotic-Associated or Toxin Mediated Colitis, A Unifying Hypothesis, Saadah, Hanna A., MD, and Esaki, Paul T., MD	453
Antipsychotic Drugs — An Update, Charalampous, K. D., MD, and Keepers, G. A., MD	6
A Case For A Positive Public Relations Program in Hospitals, Deliere, Harry M., DrPH, and Boyd, Wallace N., MPH	122
Complete Ureteral Substitution With Intestinal Segments, Barnes, William F., MD, Isaacson, Richard N., MD, and Halverstadt, Donald B., MD ...	413
Concurrent Hyperthyroidism and Hyperparathyroidism—Report of Two Cases, Males, James L., MD and Kem, David C., MD	382
Development of Ampicillin-Resistance During Treatment of Haemophilus Influenzae Pneumonia, Griffiths, William, MD, Downham, William H., MD, Roswell, Robert H., MD, and Mohr, John A., MD	3
Development of a Scoliosis Screening Program in	

Oklahoma Schools, Sullivan, J. Andy, MD, and Tompkins, S. Fulton, MD	52
Emergency Medicine — An Emerging Specialty, Wilder, Robert J., MD	120
Favism in Oklahoma, Ramadan, Tawfik Z., MD, Sexauer, Charles L., MD, and Wenzl, James E., MD	91
Hypercalcemia Corrected by Orchiectomy In A Pa- tient With Carcinoma of the Prostate, Land- garten, Steven, MD, and Soper, Michael L., MD	288
Impact of the Day of Admission on Length of Stay in a Community General Hospital, Deliere, Harry M., DrPH, and Herron, Tom, MPH	158
Introduction to Microsurgery, Rutledge, B. J., MD	309
Lipoatrophic Diabetes With Aortic Insufficiency, Bretza, Joseph, MD	351
Maternal Mortality in Oklahoma, Hemorrhage Re- mains a Problem, Jimerson, Steven D., MD, and Crosby, Warren M., MD	197
Neonatal Transport, 1976, McCaffree, Mary Anne, MD	10
Newer Antibiotics, Smith, David L., MD, Neal, Jac- quelyn, and Sexton, Daniel J., MD	155
Oklahoma High School Football Injury Study: A Pre- liminary Report, Moretz, III, Alfred, MD, Rash- kin, Alan, MD, and Grana, William A., MD	85
Physicians Who Employ Physicians Assistants: Re- sults of a Survey, Woerth, Janice, MPH, Hill, Robert F., PhD, and Godkins, Thomas R., PA	279
Pituitary Disease: The Endocrinologist's View, Males, James L., MD	311
Prevention of Meconium Aspiration Syndrome in Newborn Infants, Kallenberger, David A., MD, Block, Mary Frances, MD, and McCaffree, Mary Anne, MD	202
Prolapsing Mitral Leaflet Syndrome, Aversano, Thomas, MD	418
Salicylate-Induced Hepatotoxicity: A Review, Bryant, Charles E., MD	284
Sudden Death Following Fluorohydrocarbon Aerosol "Sniffing," Luckstead, E. F., MD, Jordan, F. B., MD, and Prouty, R. W., BS, DABFT	117
Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head, Galloway, Dan C., MD, and Phillips, William G., MD	47
Ultrasound Evaluation of Pancreatic Disease — The State of the Art, Wilson, Don A., MD, and Daniel, H. Grady, MD	379
The Vietnamese Emigre Physicians in Oklahoma From 1975 to 1977 — A Two-Year Report, Anh, Nong The, MD, and Hammarsten, James L., MD	343

SPECIAL ARTICLES

Awakening of a New Minority, Winbray, David D.	358
Emergency Medical Services as a Model For Rural Health Care Delivery, Thompson, C. Thomas, MD, FACS, and Lewis, James E., PhD	26
Physician, Educator, Anatomist and Mass Mur- derer, Lachman, Ernest, MD	354
Physician Manpower in Oklahoma in 1978, Lewis, Jr., C. S., MD, FACP	468

T

Task Force Completes Study (GN)	368
Thermography — A Negative Appraisal (E)	307
Thompson, C. Thomas, MD, FACS, and Lewis,	

James E., PhD, Emergency Medical Services as a Model For Rural Health Care Delivery (SA)	26
Tom Parker Memorial Lecture Will Be May 15 (GN) ...	179
Tompkins, S. Fulton, MD, and Sullivan, J. Andy, MD, Development of a Scoliosis Screening Pro- gram in Oklahoma Schools (S)	52
Transcatheter Embolization as an Aid to Surgical Excision of Certain Vascular Lesions of the Head, Galloway, Dan C., MD, and Phillips, William G., MD (S)	47
Troutman, Mrs. Baxter S. (Pic)	144
Trustees Approve Building Project (GN)	30
Trustees Oppose Second Opinion Panels (GN)	363
Tulsa County Medical Society Awards Scholarships (GN)	368
Tulsa Pediatric Colloquy Set For October (GN)	373
Two Hospitals Given CME Approval (GN)	405
Two Levels of Nursing Urged (GN)	449

U

Ultrasound Evaluation of Pancreatic Disease — The State f the Art, Wilson, Don A., MD, and Daniel, H. Grady, MD (S)	379
Ungerman, Arnold H., MD (D)	488
Unneeded Tests Escalate Hospital Care Costs (GN) ...	37

V

Vannatta, Jerry B., MD, (edited by) and Long, C. I., DO, Antibiotic-Associated Colitis: Report of a Case (S)	457
The Vietnamese Emigre Physicians In Oklahoma From 1975 to 1977 — A Two-Year Report, Anh, Nong The, MD, and Hammarsten, James F., MD (S)	343

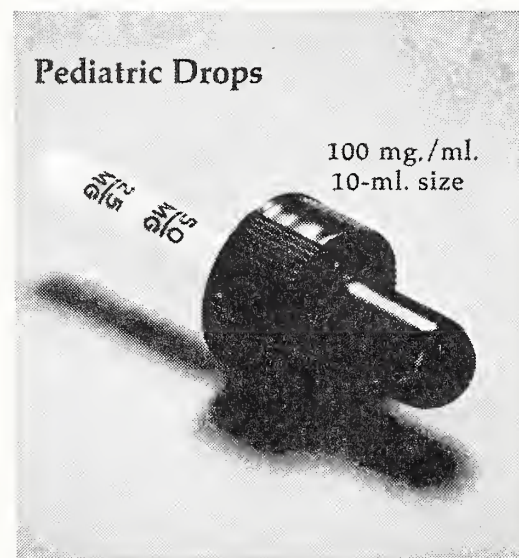
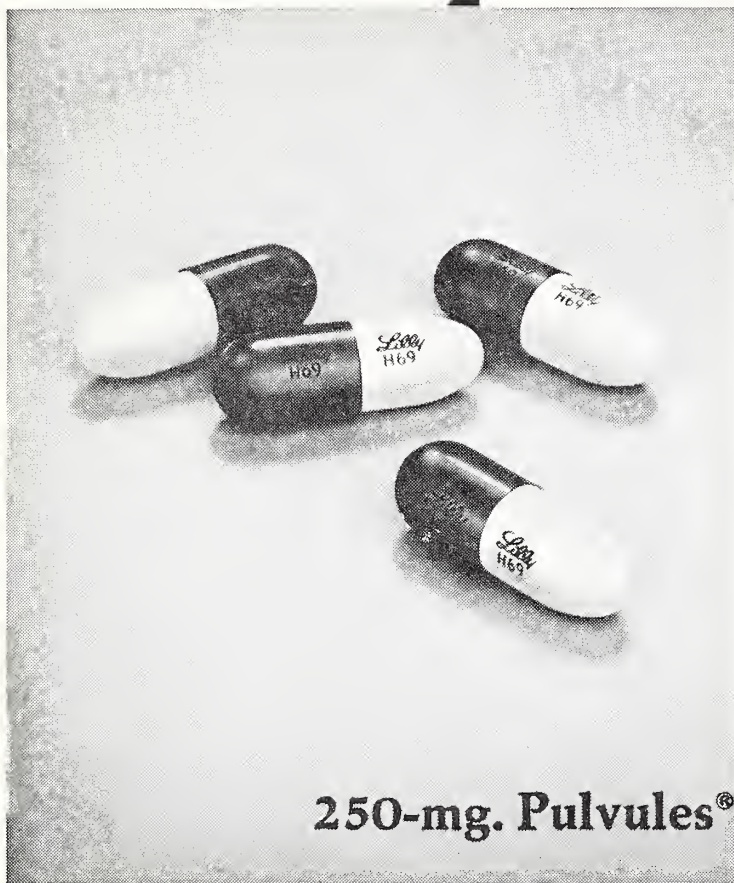
W

Wage-Price Controls Denied (GN)	447
Walter E. Brown, MD, Honored (GN)	36
Warren, W. K. (Pic)	179
Warren, W. K., Receives Award (GN)	179
Weston, Mr. Goffrey (Pic)	101
Wenzl, James E., MD, Ramadan, Tawfik, Z., MD, and Sexauer, Charles L., MD, Favism in Ok- lahoma (S)	91
White, Robert S., MD, King, James, MD, and Self, Jane, MD, Adult Gaucher's Disease A Report of Three Cases in Northeast Oklahoma (S)	165
Wilder, Robert J., MD, Emergency Medicine — An Emerging Specialty (S)	120
Wilson, Don A., MD, and Daniel, H. Grady, MD, Ultrasound Evaluation of Pancreatic Disease — The State of the Art (S)	379
W. K. Warren Receives Award (GN)	179
Winbray, David D., Awakening of a New Minority (SA)	358
Woerth, Janice, MPH, Hill, Robert F., PhD, and Godkins, Thomas R., PA, Physicians Who Em- ploy Physicians Assistants: Results of a Survey (S)	279
Woman's Auxiliary (GN) ..(Jan) xxxv, (Feb) xxix, (Mar) xxvii, (May) xxix, (Sept) xxxi, (Nov) xxxi, (Dec) xix	
Would Reject Bakke Again, Says Admissions Chairman (GN)	407

Y

Young, Mrs. Chester ..(Pic)	144
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